

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES1

- OS1: HNGS
- OS2: HRLA
- OS3: MSS
- OS4: HLDS
- OS5: FMS

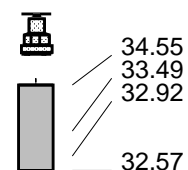
REMARKS: RUN NUMBER 1

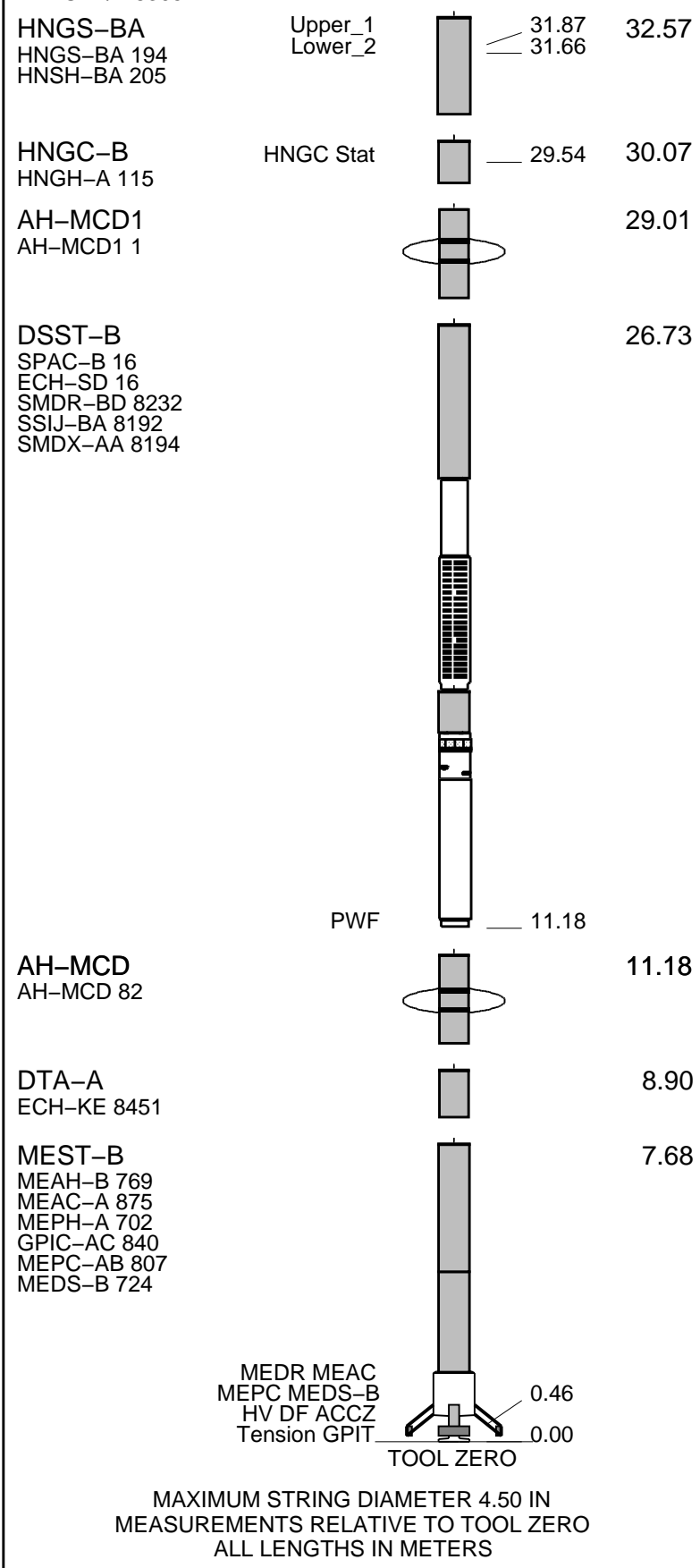
Hole drilled and cored using APC/XCB coring system.
 Modified MCD devices run above and below HRLA for centralization.
 HLDS and MSS eccentralized by caliper and bowspring with knuckled to decouple from HRLA.
 LFV Actuator (Go-Devil) run attached to bottom of MSS for LFV locking open / closed.
 Logs recorded from drill floor (1919.1m above permanent datum) then shifted to zero at sea floor.
 Active Heave Compensator (AHC) switched off at 120mbsf to facilitate pipe entry.
 Caliper closed at 99mbsf to facilitate pipe entry.
 Run 1 Main pass used as depth reference for logging job; all other runs/passes correlated to that main pass.
 AHC not used for downlog, but engaged prior to opening calipers for repeat section and used for both up passes.
 Unable to descend below 398.6mbsf on this run; logs recorded from that depth.
 DSI P&S in standard frequency, Upper Dipole in standard frequency, and Stoneley in standard frequency for all passes.
 DSI Lower Dipole in Low-Frequency Dipole (LFD) mode for downlog, but standard frequency for both up passes.

RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION: 19C0-187			PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1	RUN 2
SURFACE EQUIPMENT	
GSR-U 616008 WITM (EDTS)-A	

RUN 1	RUN 2
DOWNHOLE EQUIPMENT	
LEH-MT 101 LEH-MT 101 101 EDTC-B EDTH-B 8303 EDTC-B 8317 EDTG-A/B 8305	MDSB_EDTC Mud Tempe CTEM Gamma Ray EFTB DIAG TelStatus EDTCB Ele
	
	34.55 33.49 32.92 34.55 32.57



Production String	(in)	(m)	Well Schematic	(m)	(in)	Casing String
	OP	ID		MD	MD	

Kelly Bushing Elevation

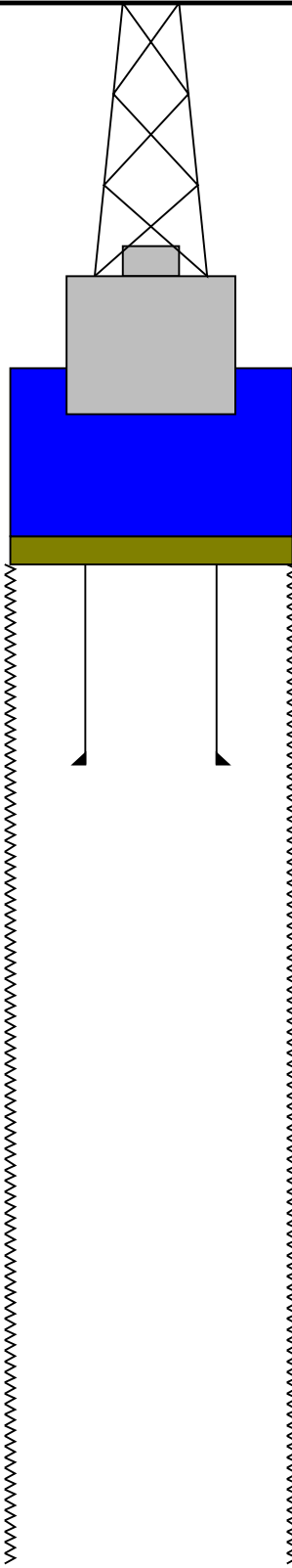
Derrick Floor Elevation

Mean Sea Level

-1919.1

-1919.1

-1908.1



0.0

Sea Bed

81.9

5.500

4.000

Bit

407.3

11.750

Total Depth - Driller

Schlumberger

**Downlog
1:200 Scale**

MAXIS Field Log

Company: Lamont Doherty Earth Observatory

Well: Expedition 346, Site U1430B

Input DLIS Files

FMS_DSI_NGS_034PUP	FN:34	31-Aug-2013 13:33	399.0 M	-37.3 M
--------------------	-------	-------------------	---------	---------

Output DLIS Files

DEFAULT	FMS_DSI_NGS_046PUP	FN:51	PRODUCER	20-Sep-2013 13:53	399.3 M	-37.3 M
CLIENT	FMS_DSI_NGS_046PUC	FN:52	CUSTOMER	20-Sep-2013 13:53	399.3 M	-37.3 M

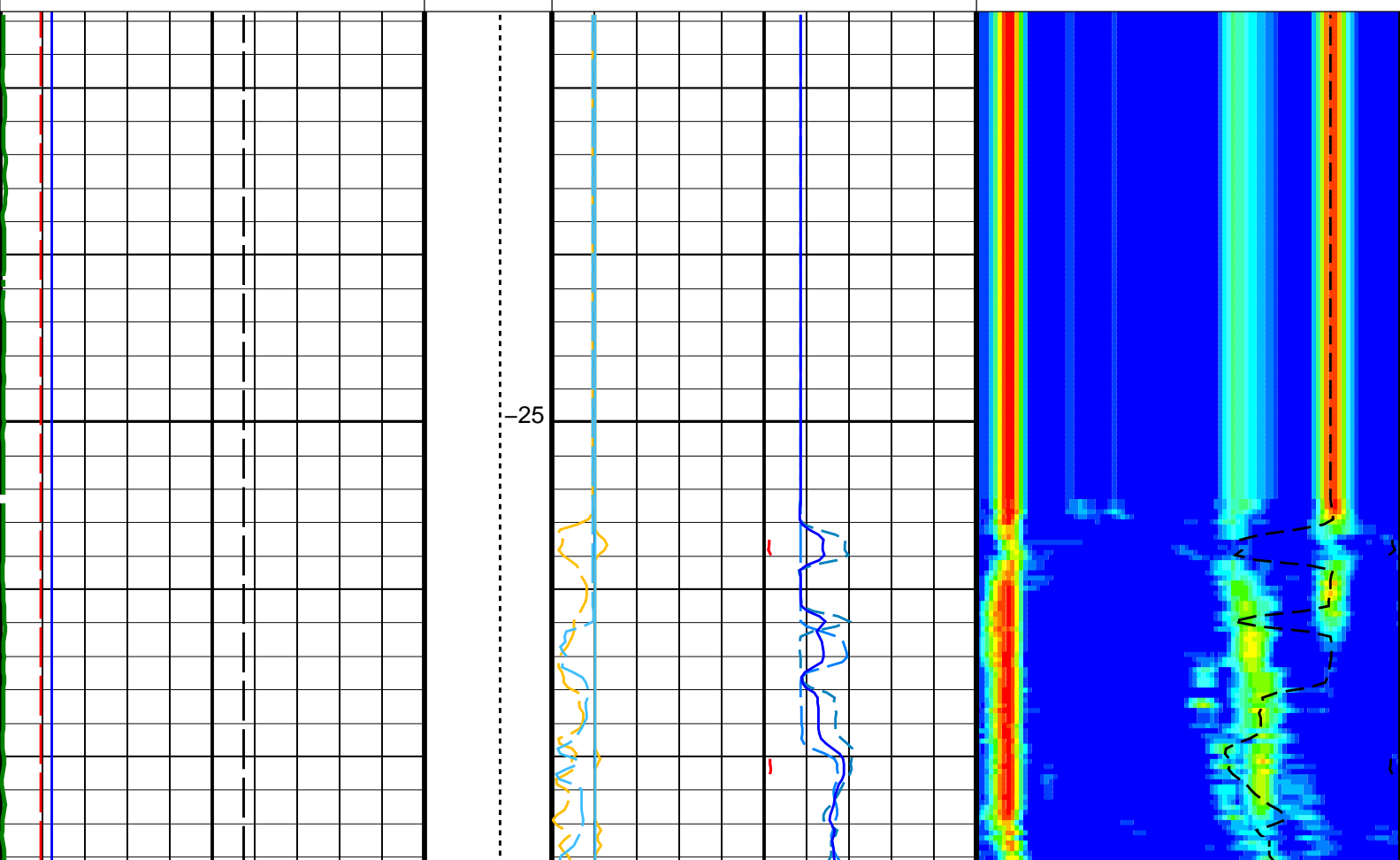
OP System Version: 19C0-187

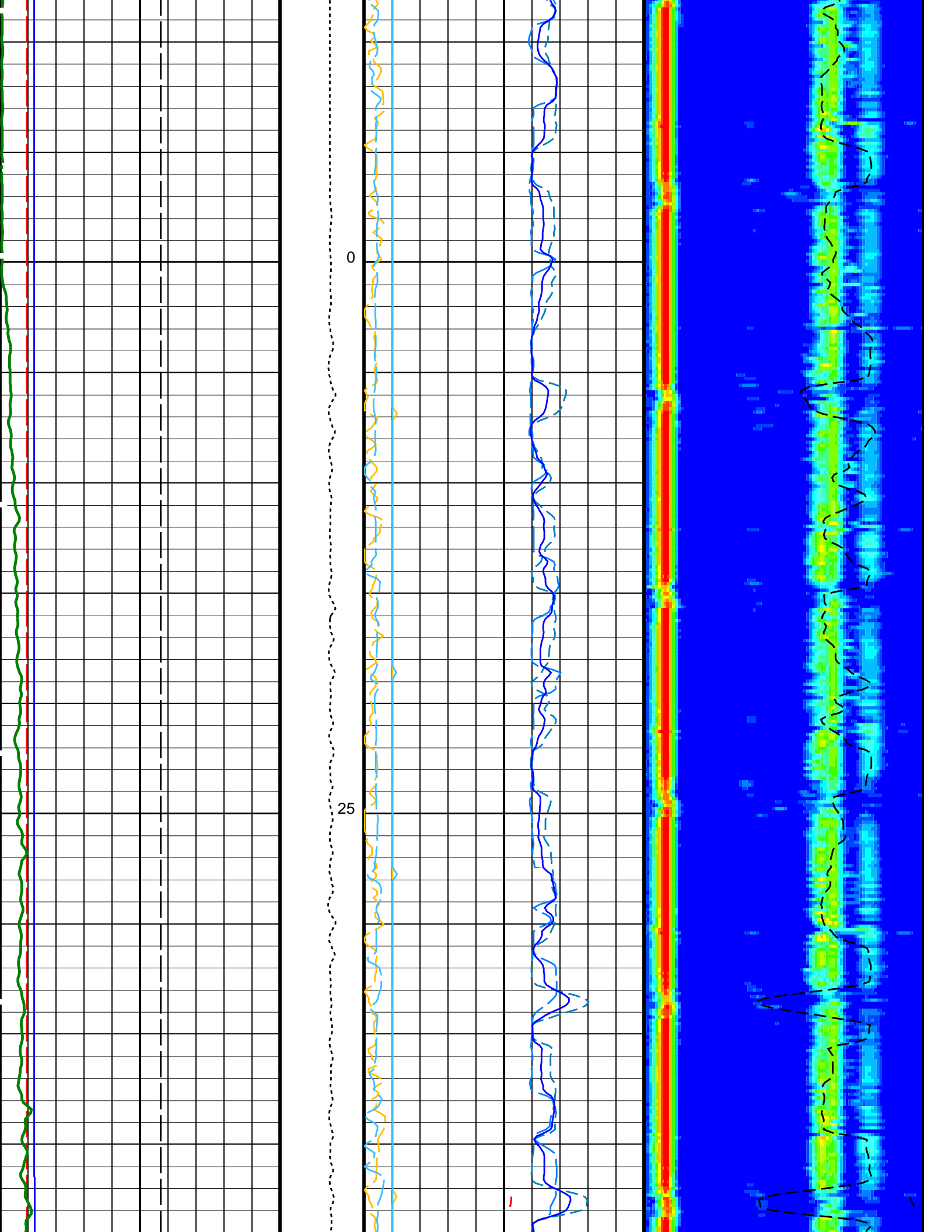
MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

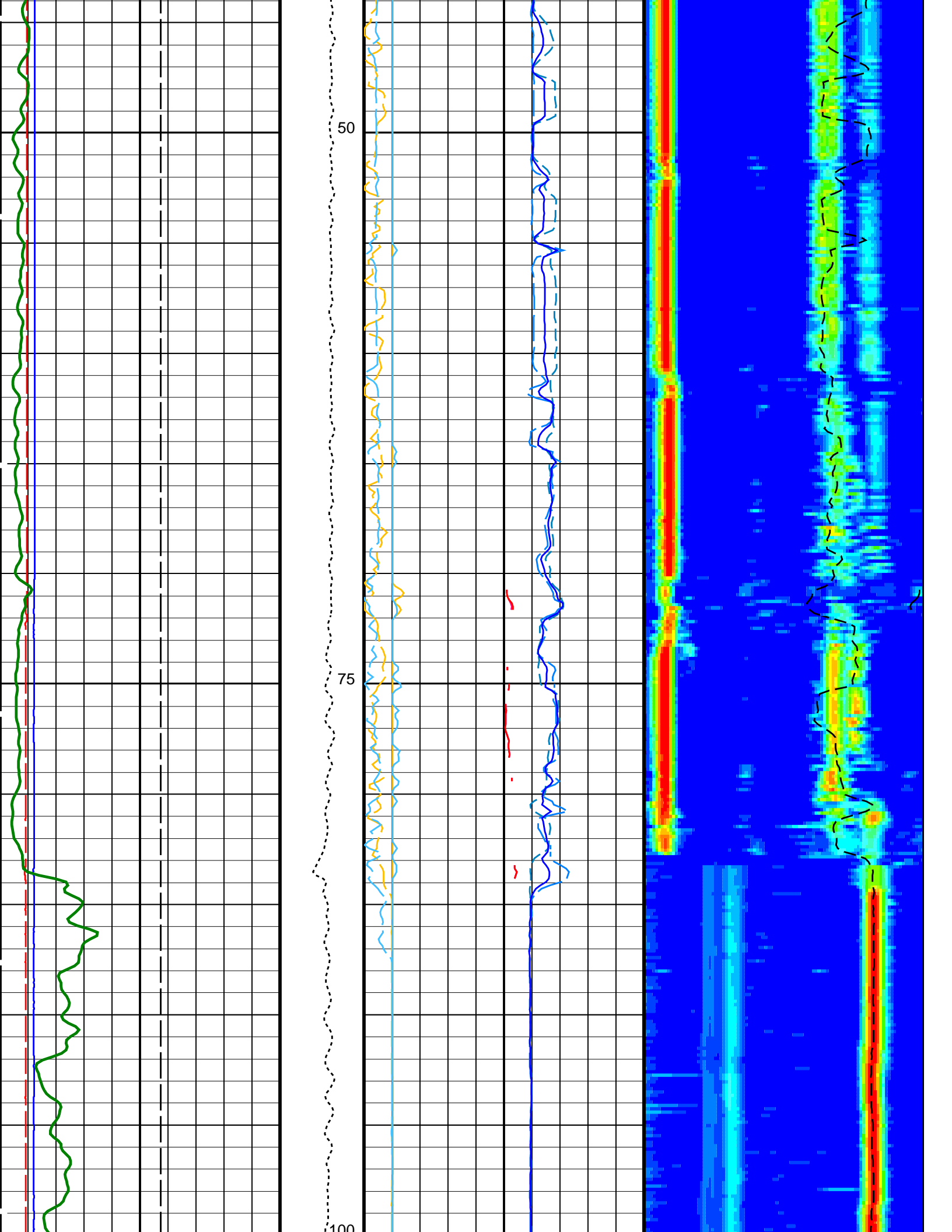
PIP SUMMARY

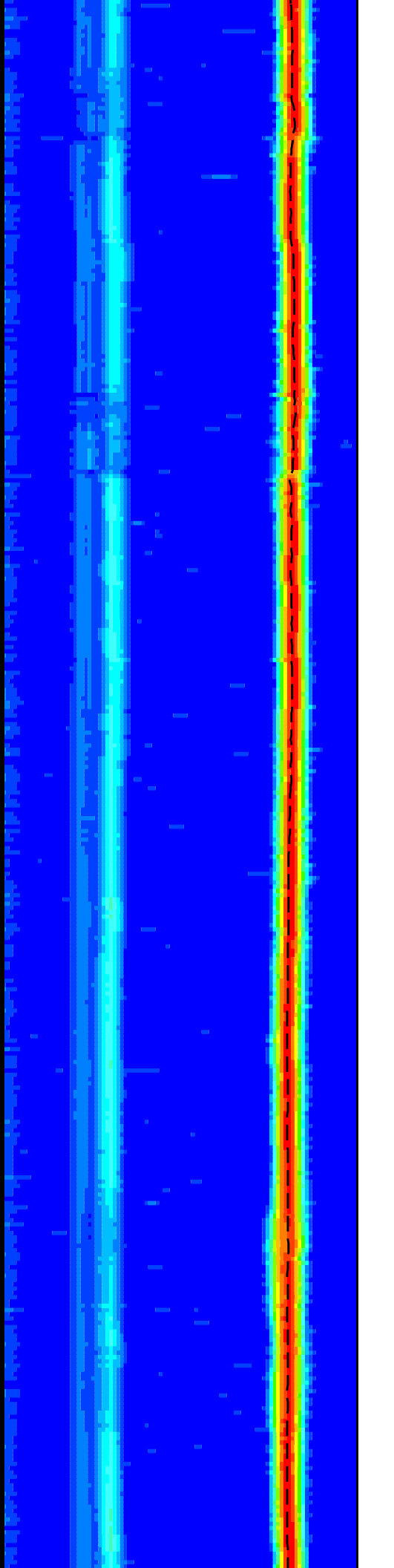
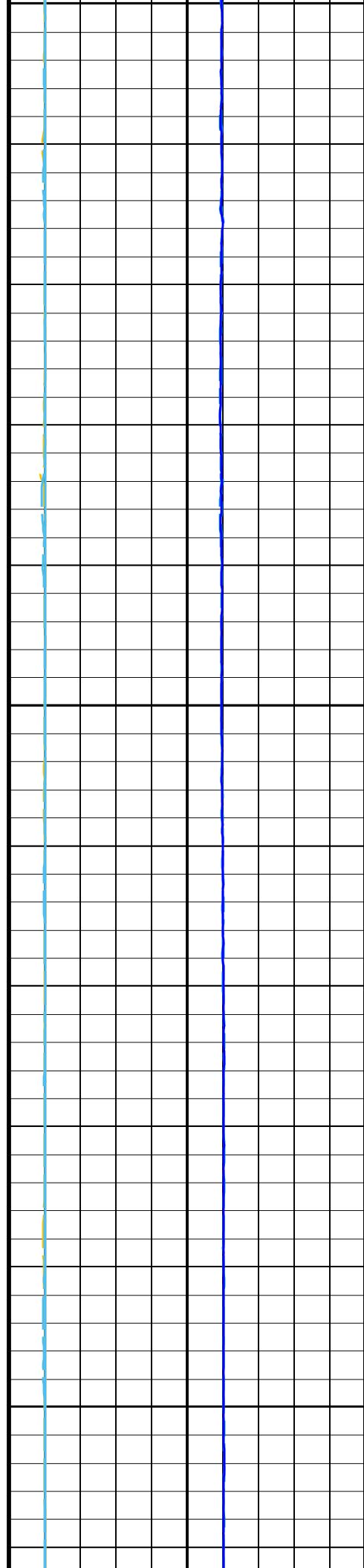
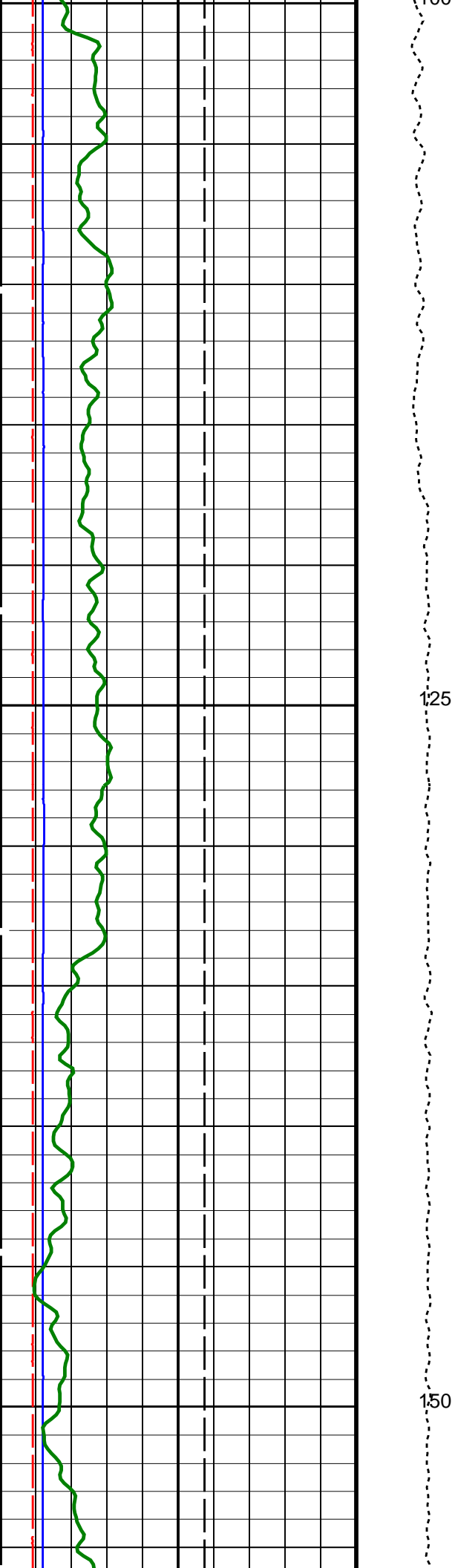
Time Mark Every 60 S

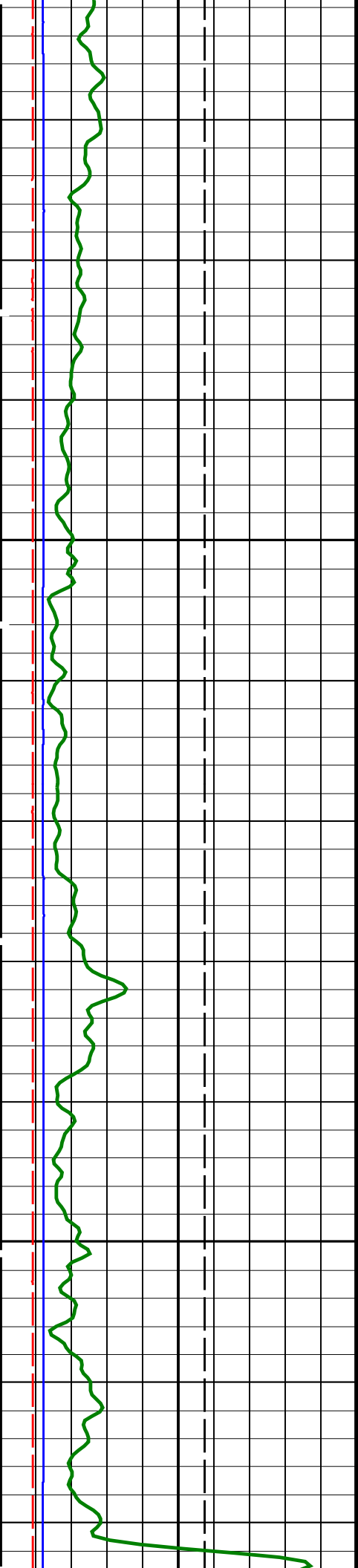
		Delta-T Shear - P & S (DT4S)			
		440	(US/F)	40	
		Delta-T Shear / TA - P & S (DTTS)			
		440	(US/F)	40	
		Delta-T Shear / RA - P & S (DTRS)			
		440	(US/F)	40	
		Delta-T Comp - P & S (DT4P)			
		440	(US/F)	40	
		Delta-T Comp / TA - P & S (DTPP)			
		440	(US/F)	40	
		Delta-T Comp / RA - P & S (DTRP)			
		440	(US/F)	40	
HNGS Spectroscopy Gamma Ray (HSGR)		Peak Coherence / TA - P & S Shear (CHTS)			
0	(GAPI)	-1	(----	9	
Caliper 2 (C2)		Peak Coherence / RA - P & S Shear (CHRS)		Min Amplitude Max	
0	(IN)	-1	(----	9	
Caliper 1 (C1)		Peak Coherence / TA - P & S Comp (CHTP)		Rec.Array P&S Slow Proj. CVDL (SPR4)	
0	(IN)	0	(----	40 240	
Bit Size (BS)		Peak Coherence / RA - P & S Comp (CHRP)		Delta-T Shear / RA - P & S (DTRS)	
0	(IN)	0	(----	40 240	
Tension (TENS) (LBF)		Delta-T Comp / RA - P & S (DTRP)		Delta-T Comp / RA - P & S (DTRP)	
0	5000	40	(US/F)	240	





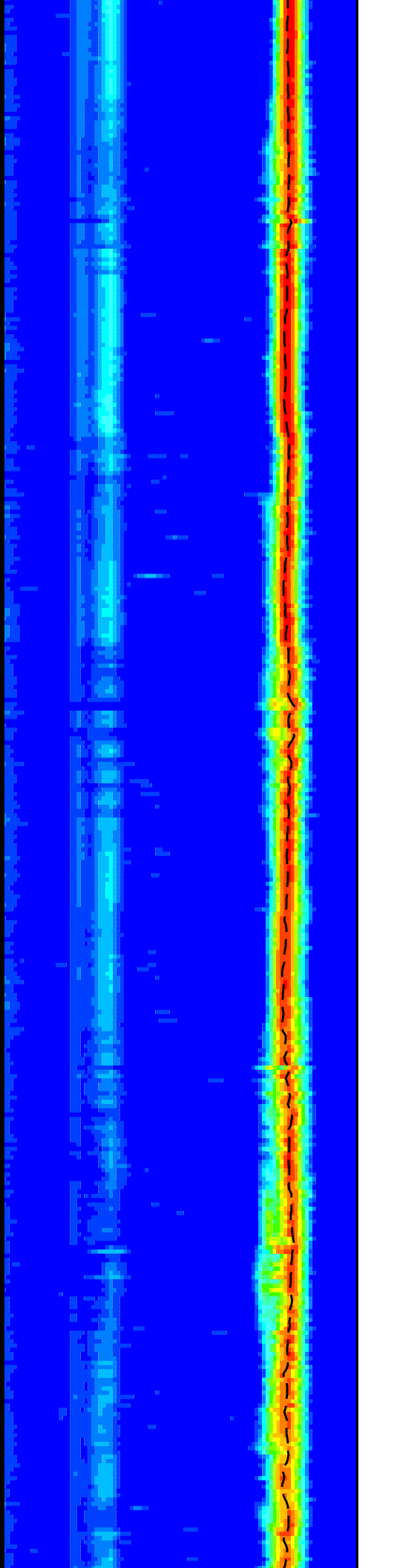
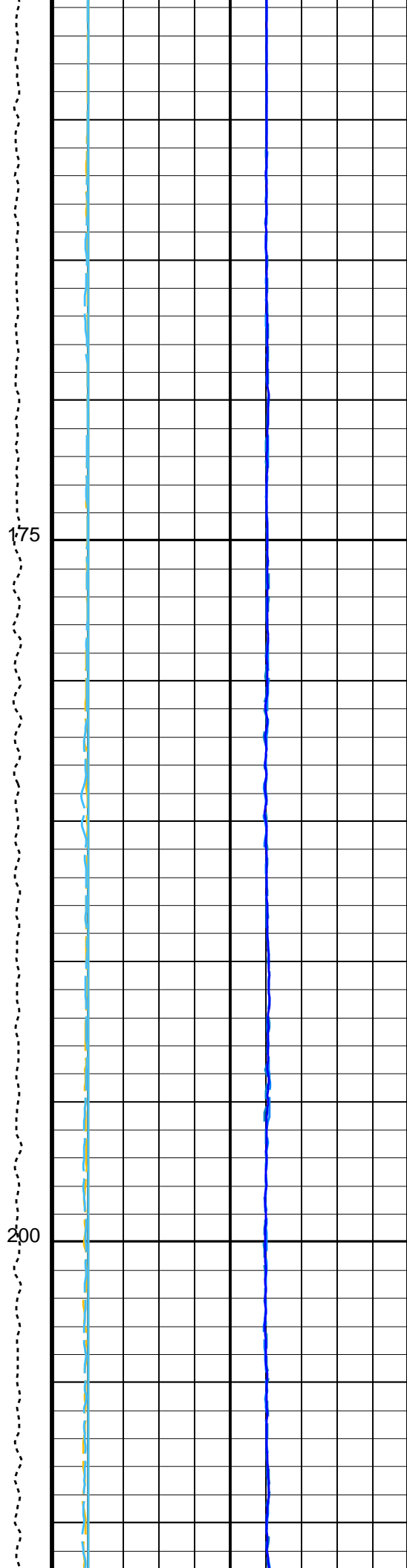


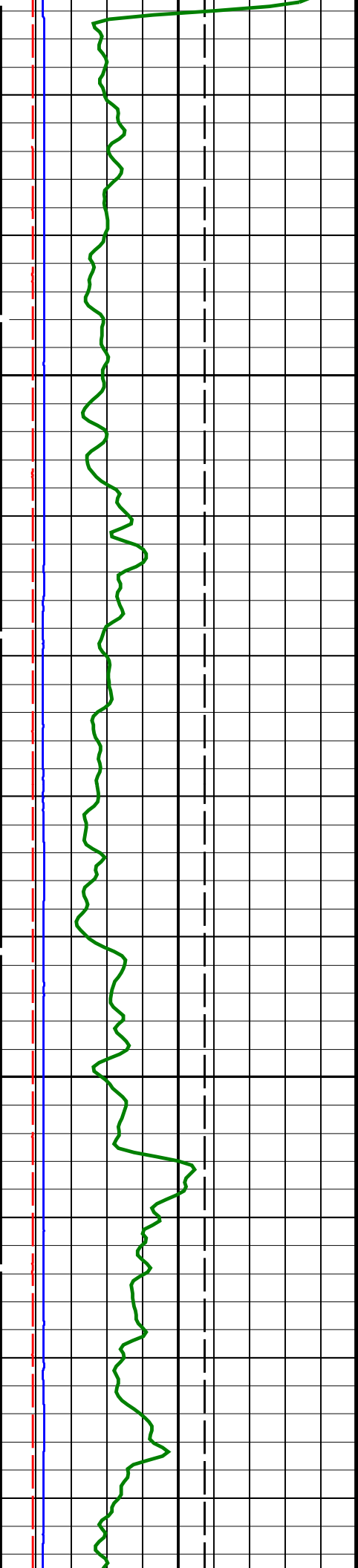




175

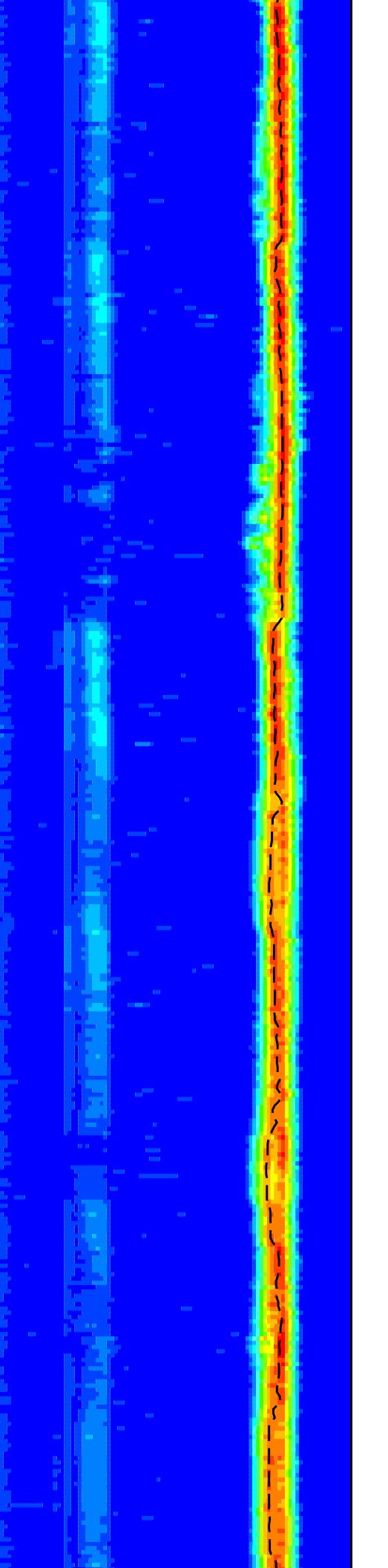
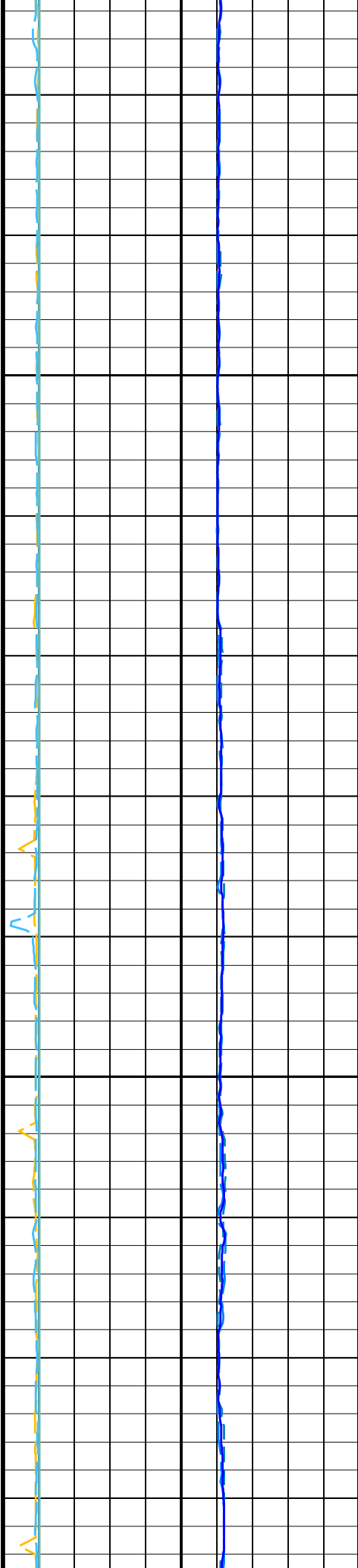
200

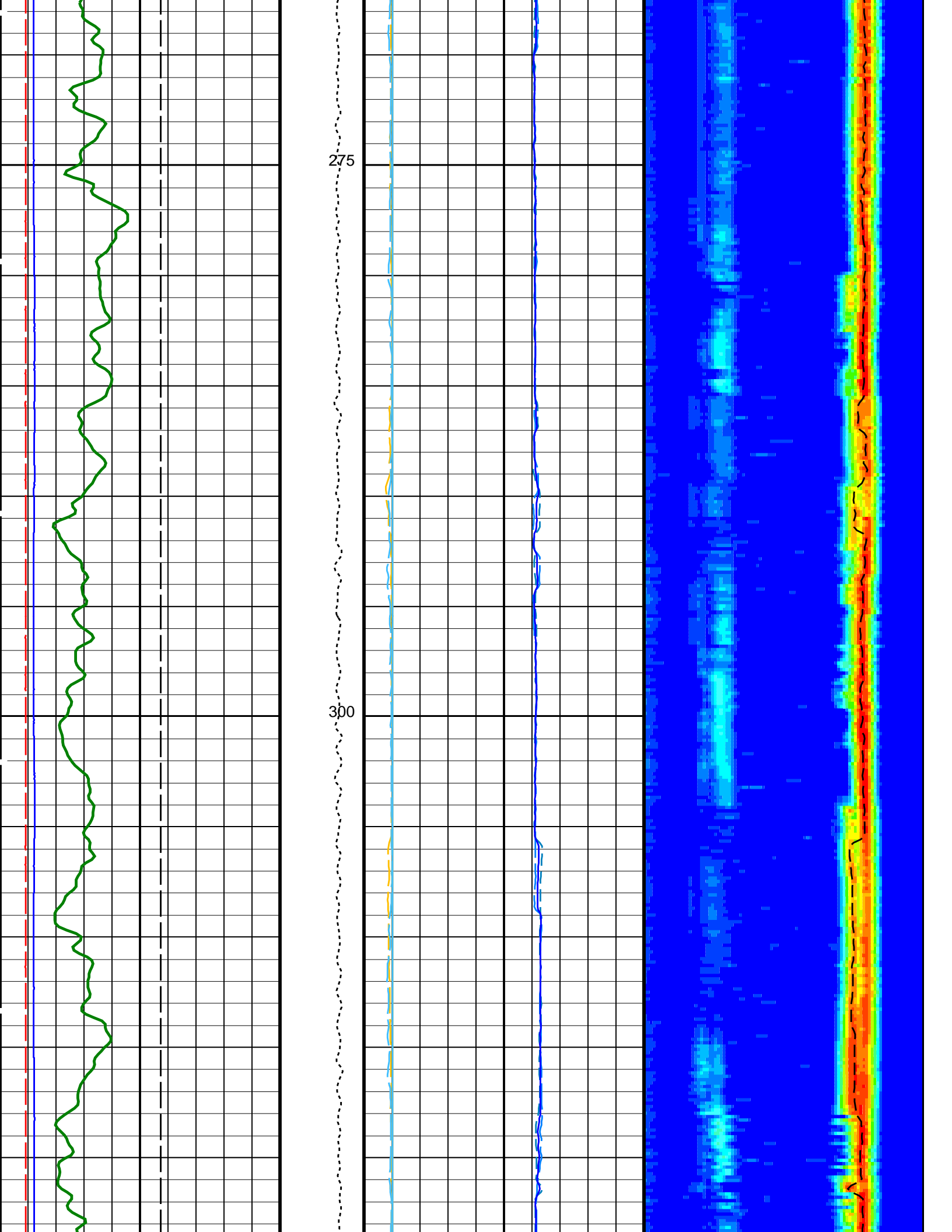


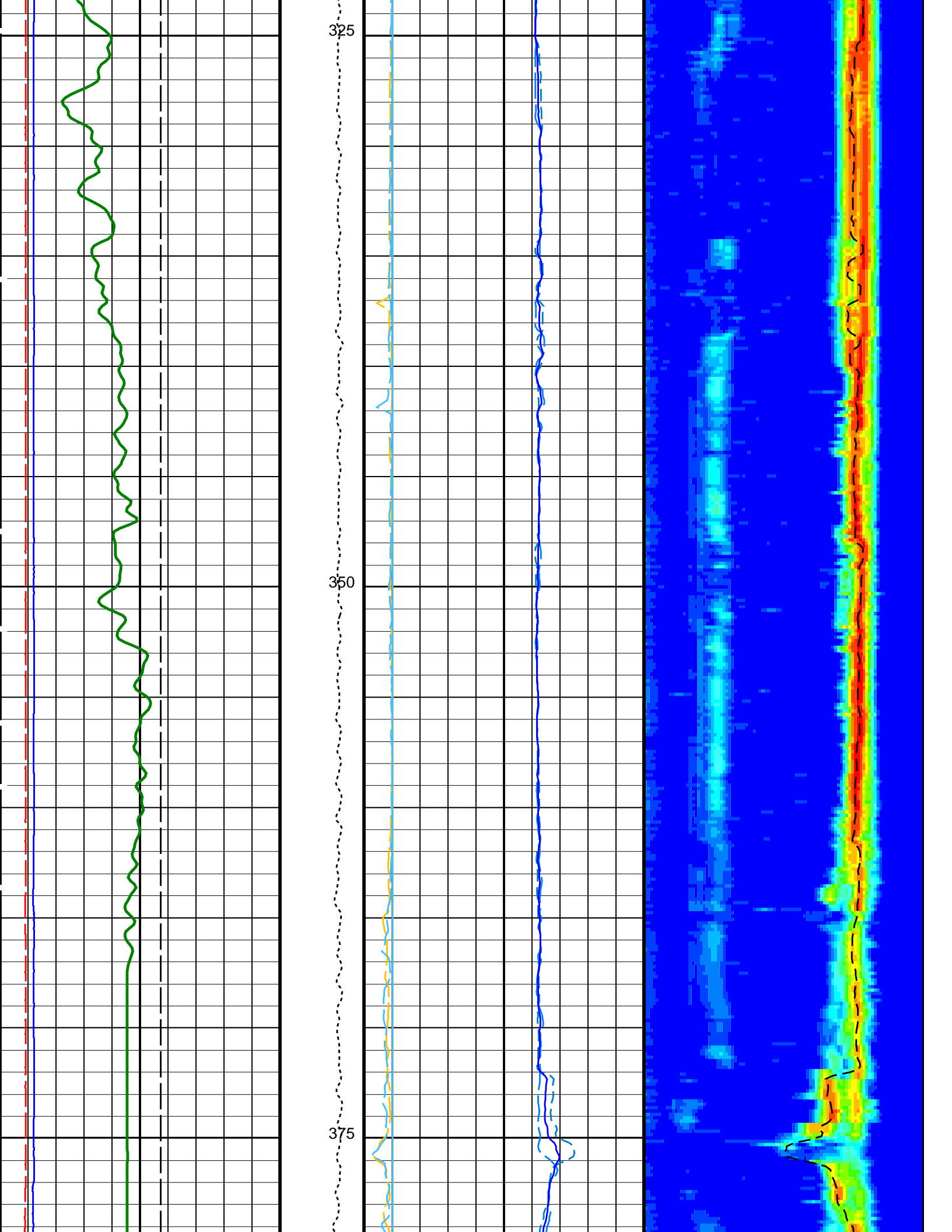


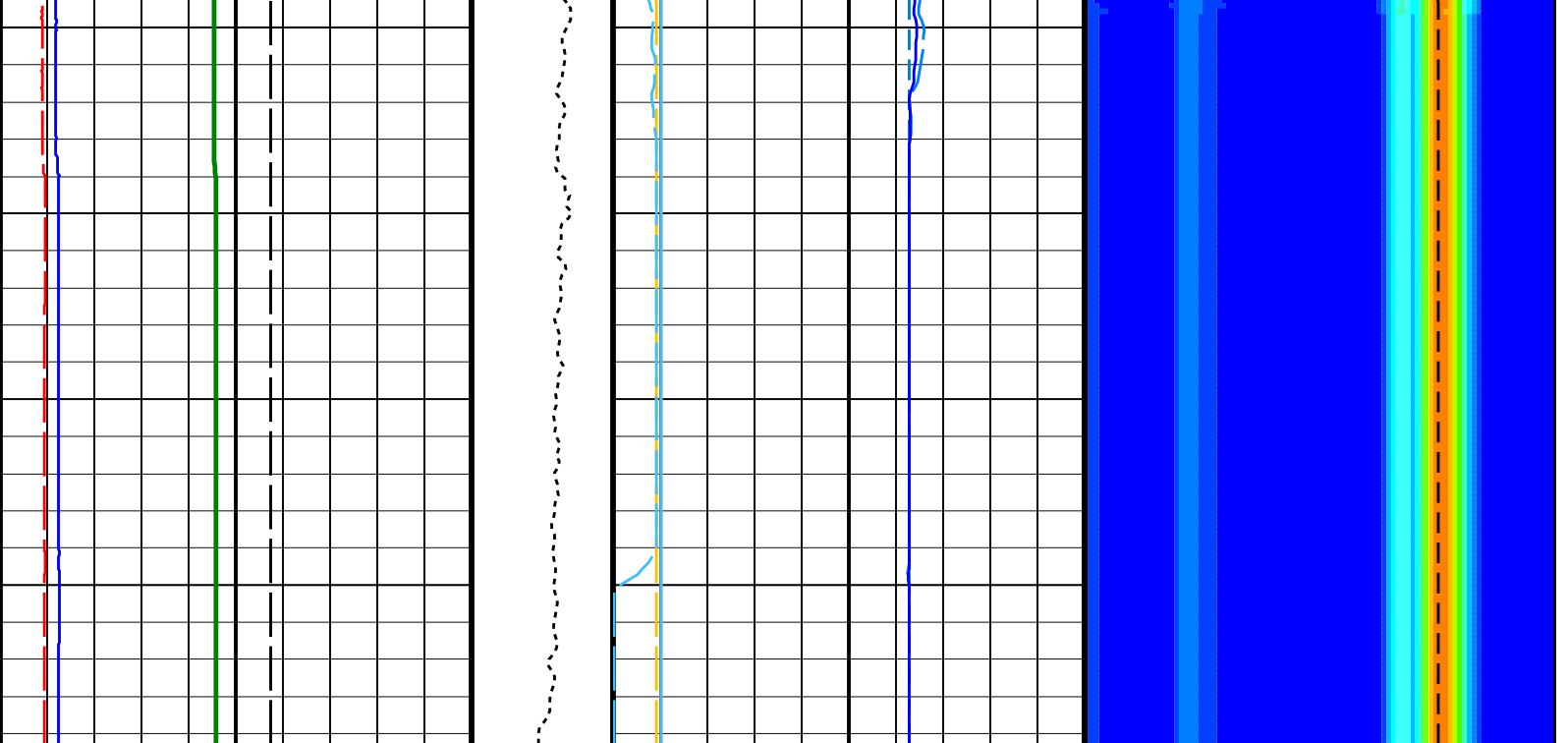
225

250









0	Bit Size (BS) (IN)	20	0	Tension (TENS) (LBF)	5000	0	Peak Coherence / RA - P & S Comp (CHRP)	10	40	Delta-T Comp / RA - P & S (DTRP)	240
0	Caliper 1 (C1) (IN)	20	0	Peak Coherence / TA - P & S Comp (CHTP)	10	40	Delta-T Shear / RA - P & S (DTRS)	240	Min Amplitude Max Rec.Array P&S Slow Proj. CVDL (SPR4) (US/F)		
0	Caliper 2 (C2) (IN)	20	-1	Peak Coherence / RA - P & S Shear (CHRS)	9	440	Delta-T Comp / RA - P & S (DTRP)	40			
0	HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)	100	-1	Peak Coherence / TA - P & S Shear (CHTS)	9	440	Delta-T Comp / TA - P & S (DTTP)	40			
			440	Delta-T Comp - P & S (DT4P)	40	440	Delta-T Shear / RA - P & S (DTRS)	40			
			440	Delta-T Shear / TA - P & S (DTTS)	40	440	Delta-T Shear - P & S (DT4S)	40			

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
DSST-B:	Dipole Shear Imager - B	
BHS	Borehole Status	OPEN
CASF	Label Casing Function - Monopole P&S	50
COLL	Label Slowness Lower Limit - Monopole P&S Compressional	120 US/F

COLL	Label Slowness Lower Limit - Monopole P&S Compressional	120	US/F
COUL	Label Slowness Upper Limit - Monopole P&S Compressional	240	US/F
DDE4	Digitizing Delay 4	0	US
DDEX	Digitizing Delay X	0	US
DSI4	Digitizer Sample Interval 4	10	US
DSIX	Digitizer Sample Interval X	40	US
DTF	Delta-T Fluid	189	US/F
DWC4	Digitizer Word Count 4	512	
DWCX	Digitizer Word Count X	512	
FILG	Label Fill Gap Control - Monopole P&S	COMP_SHEAR	
GCSE	Generalized Caliper Selection	C1	
LFC	Label Formation Character - Monopole P&S	DYNAMIC	
MCS	Mean Casing Slowness	57	US/F
MTXG	Monopole Transmitter Geometry	186	IN
NWI4	Number Waveform Items 4	8	
NWIX	Number Waveform Items X	0	
RSMN	Label Shear/Compressional Minimum Ratio - Monopole P&S	1.4	
RSMX	Label Shear/Compressional Maximum Ratio - Monopole P&S	2.12	
RX1G	Receiver 1 Geometry	294	IN
RX2G	Receiver 2 Geometry	300	IN
RX3G	Receiver 3 Geometry	306	IN
RX4G	Receiver 4 Geometry	312	IN
RX5G	Receiver 5 Geometry	318	IN
RX6G	Receiver 6 Geometry	324	IN
RX7G	Receiver 7 Geometry	330	IN
RX8G	Receiver 8 Geometry	336	IN
SAM4	DSST Sonic Acquisition Mode 4 - Monopole Mode for P&S	ODD	
SAMX	DSST Sonic Acquisition Mode X - Both Dipoles or Monopole Mode for Expert	OFF	
SAS4	STC Sonic Array Status - Monopole P&S	255	
SBO4	STC Search Band Offset - Monopole P&S	500	US
SBR4	STC Baseline Removal - Monopole P&S	ON	
SBW4	STC Search Bandwidth - Monopole P&S	2000	US
SFC4	STC Formation Character - Monopole P&S	SELECTABLE	
SFM4	STC Filter - Monopole P&S	B3-20K	
SHLL	Label Slowness Lower Limit - Monopole P&S Shear	210	US/F
SHUL	Label Slowness Upper Limit - Monopole P&S Shear	240	US/F
SLL4	STC Slowness Lower Limit - Monopole P&S	40	US/F
SST4	STC Slowness Step - Monopole P&S	2	US/F
SSW4	STC Source Waveform - Monopole P&S	WF_SAM4	
STLL	Label Slowness Lower Limit - Monopole Stoneley	180	US/F
STUL	Label Slowness Upper Limit - Monopole Stoneley	780	US/F
SUL4	STC Slowness Upper Limit - Monopole P&S	440	US/F
SWD4	STC Slowness Width - Monopole P&S	10	US/F
TBF4	STC Time for Baseline Fill - Monopole P&S	300	US
TLL4	STC Time Lower Limit - Monopole P&S	150	US
TST4	STC Time Step - Monopole P&S	50	US
TUL4	STC Time Upper Limit - Monopole P&S	5110	US
TWD4	STC Time Width - Monopole P&S	1000	US
TWI4	STC Integration Time Window - Monopole P&S	500	US
TWSX	Transmitter Waveform Select X	0	
HNGB-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	C1	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.0214685	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	-999.25	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	-999.25	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.973109	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.963734	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
System and Miscellaneous			
BS	Bit Size	11.438	IN
DFD	Drilling Fluid Density	1.26	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	RECOMPUTE	

OP System Version: 19C0-187

MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

Input DLIS Files

FMS_DSI_NGS_034PUP	FN:34	31-Aug-2013 13:33	399.0 M	-37.3 M
--------------------	-------	-------------------	---------	---------

Output DLIS Files

DEFAULT	FMS_DSI_NGS_046PUP	FN:51	PRODUCER	20-Sep-2013 13:53
CLIENT	FMS_DSI_NGS_046PUC	FN:52	CUSTOMER	20-Sep-2013 13:53



**First Pass
1:200 Scale**

MAXIS Field Log

Company: Lamont Doherty Earth Observatory

Well: Expedition 346, Site U1430B

Input DLIS Files

DEFAULT	FMS_DSI_NGS_035PUP	FN:36	PRODUCER	31-Aug-2013 13:39	397.8 M	90.1 M
---------	--------------------	-------	----------	-------------------	---------	--------

Output DLIS Files

DEFAULT	FMS_DSI_NGS_047PUP	FN:53	PRODUCER	20-Sep-2013 13:54	397.8 M	90.1 M
CLIENT	FMS_DSI_NGS_047PUC	FN:54	CUSTOMER	20-Sep-2013 13:54	397.8 M	90.1 M

OP System Version: 19C0-187

MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

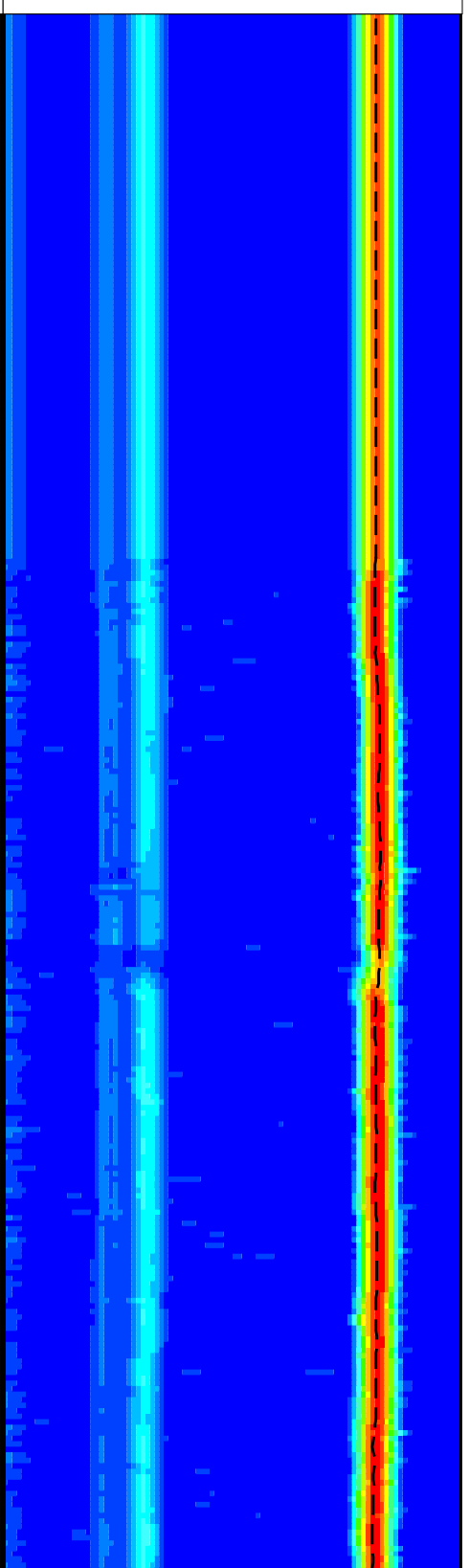
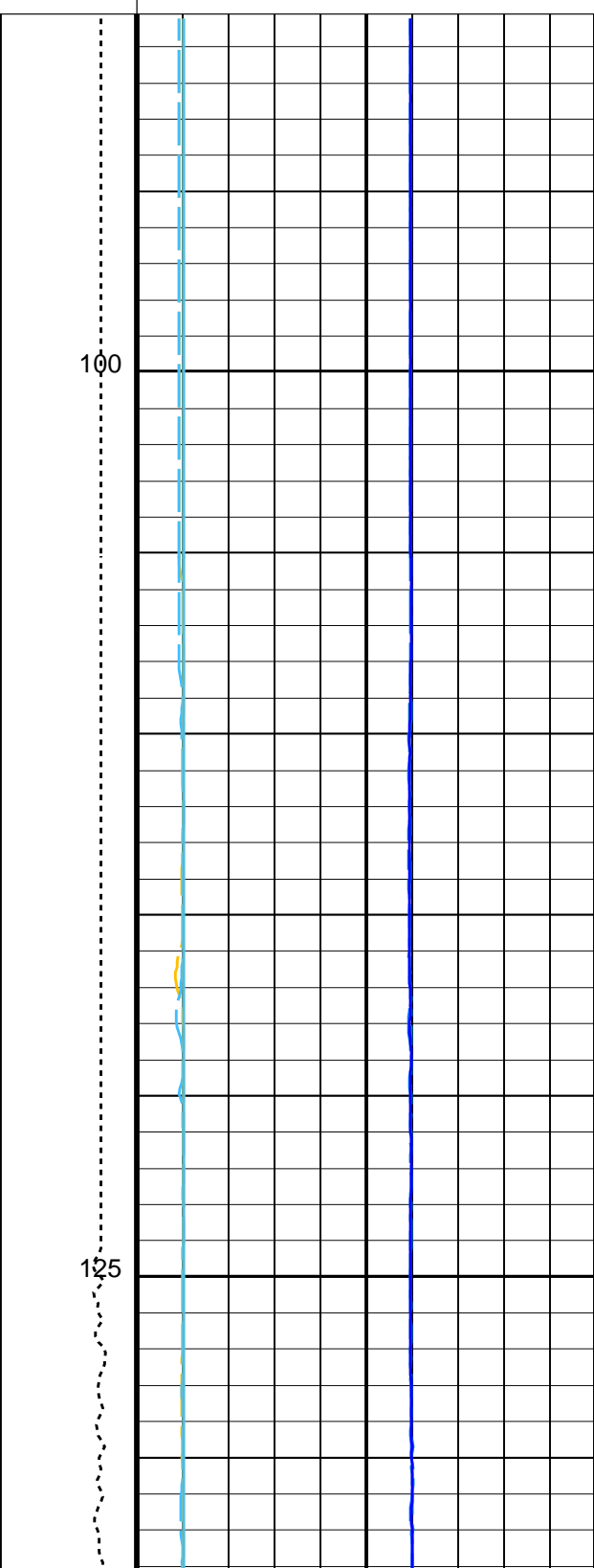
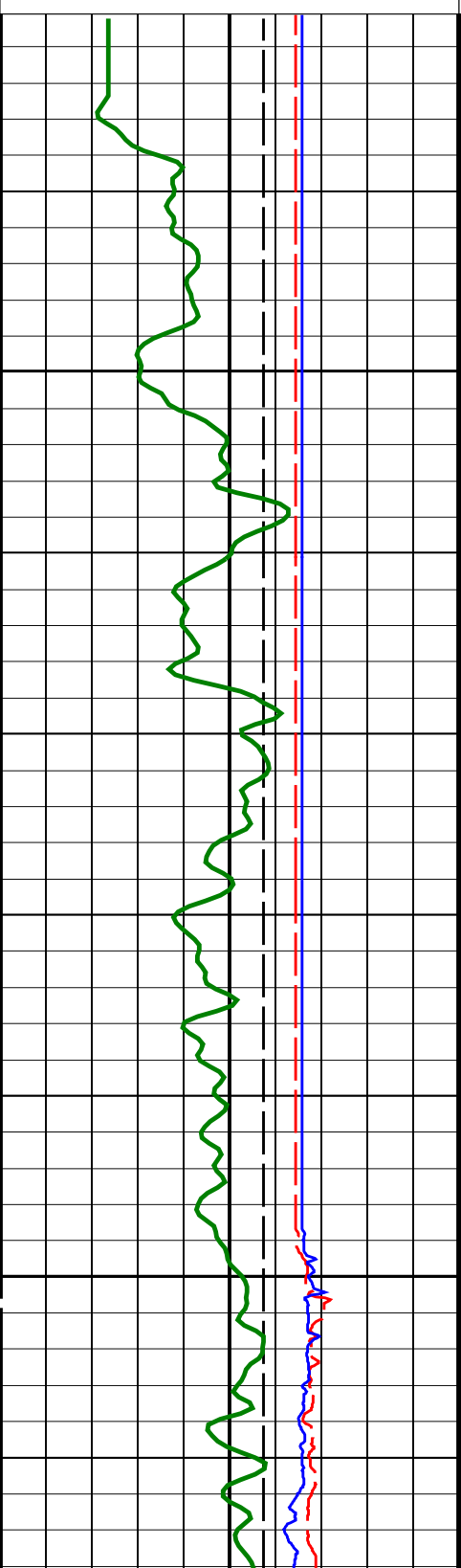
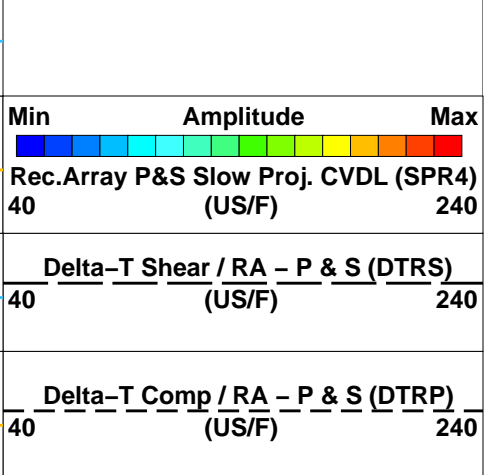
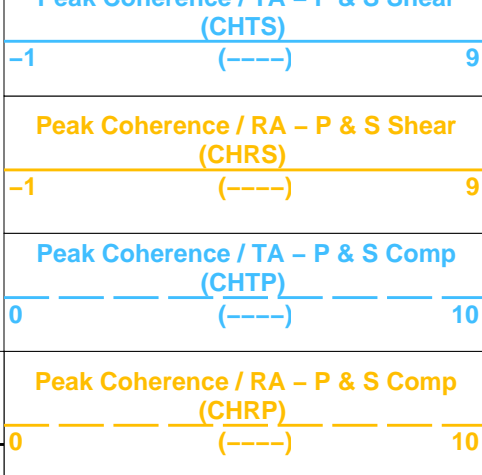
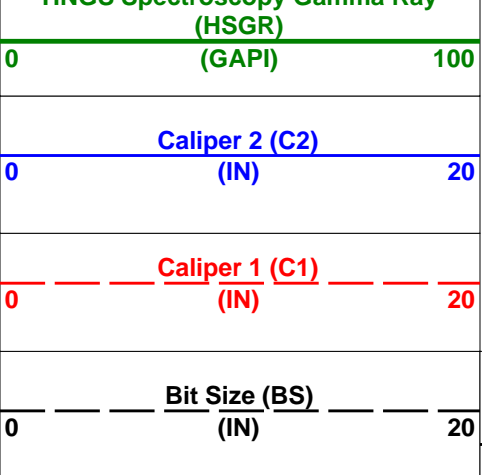
PIP SUMMARY

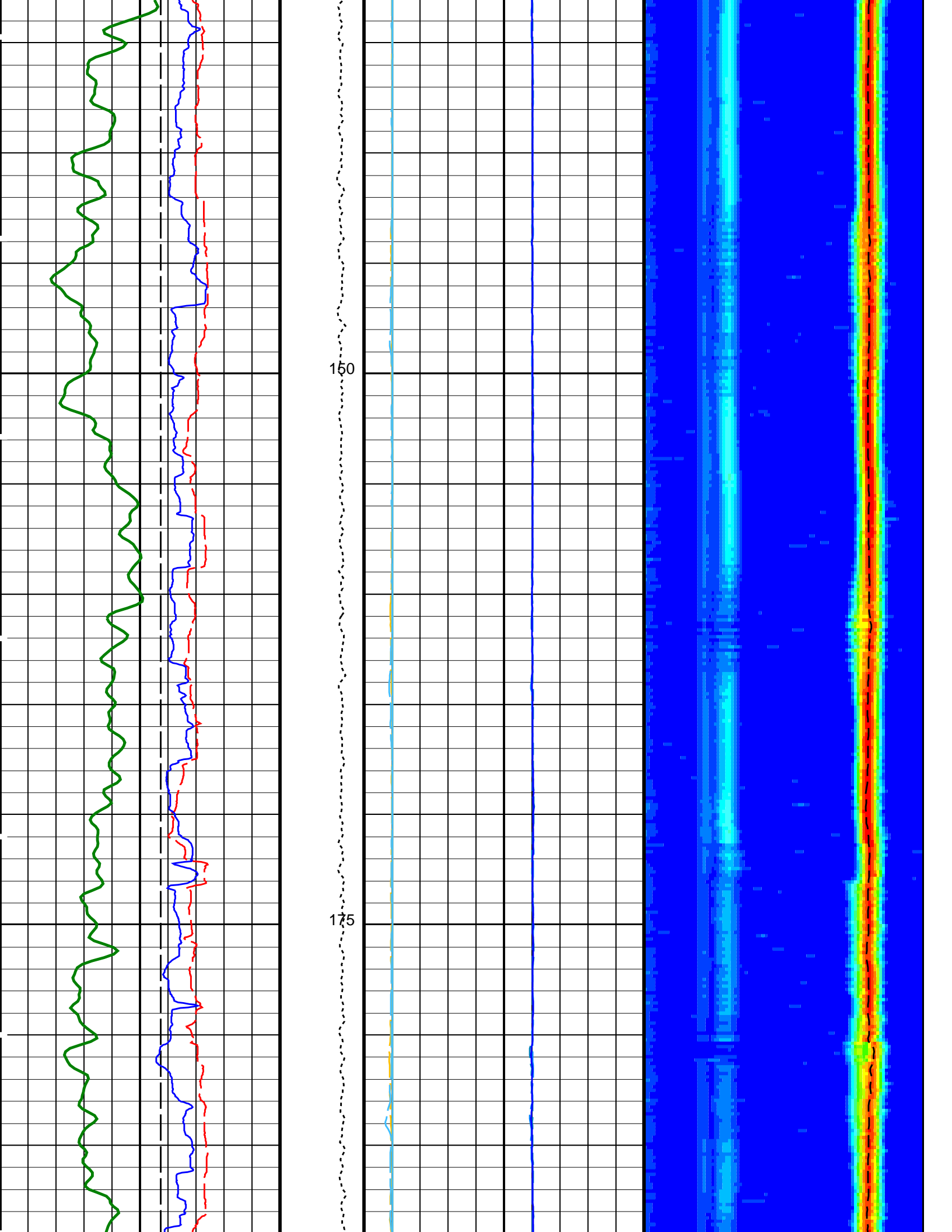
Time Mark Every 60 S

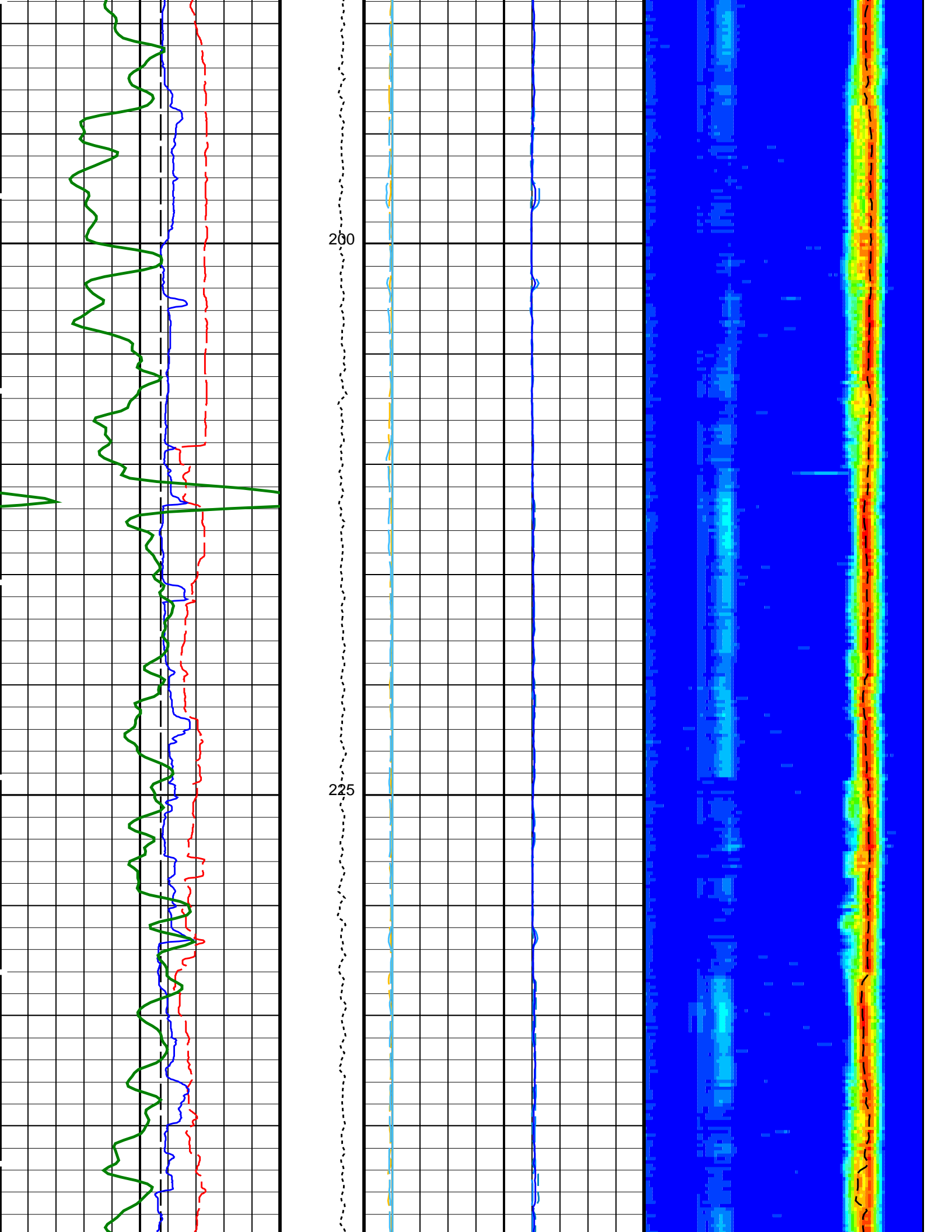
Delta-T Shear - P & S (DT4S)		
440	(US/F)	40
Delta-T Shear / TA - P & S (DTTS)		
440	(US/F)	40
Delta-T Shear / RA - P & S (DTRS)		
440	(US/F)	40
Delta-T Comp - P & S (DT4P)		
440	(US/F)	40
Delta-T Comp / TA - P & S (DTTP)		
440	(US/F)	40
Delta-T Comp / RA - P & S (DTRP)		
440	(US/F)	40

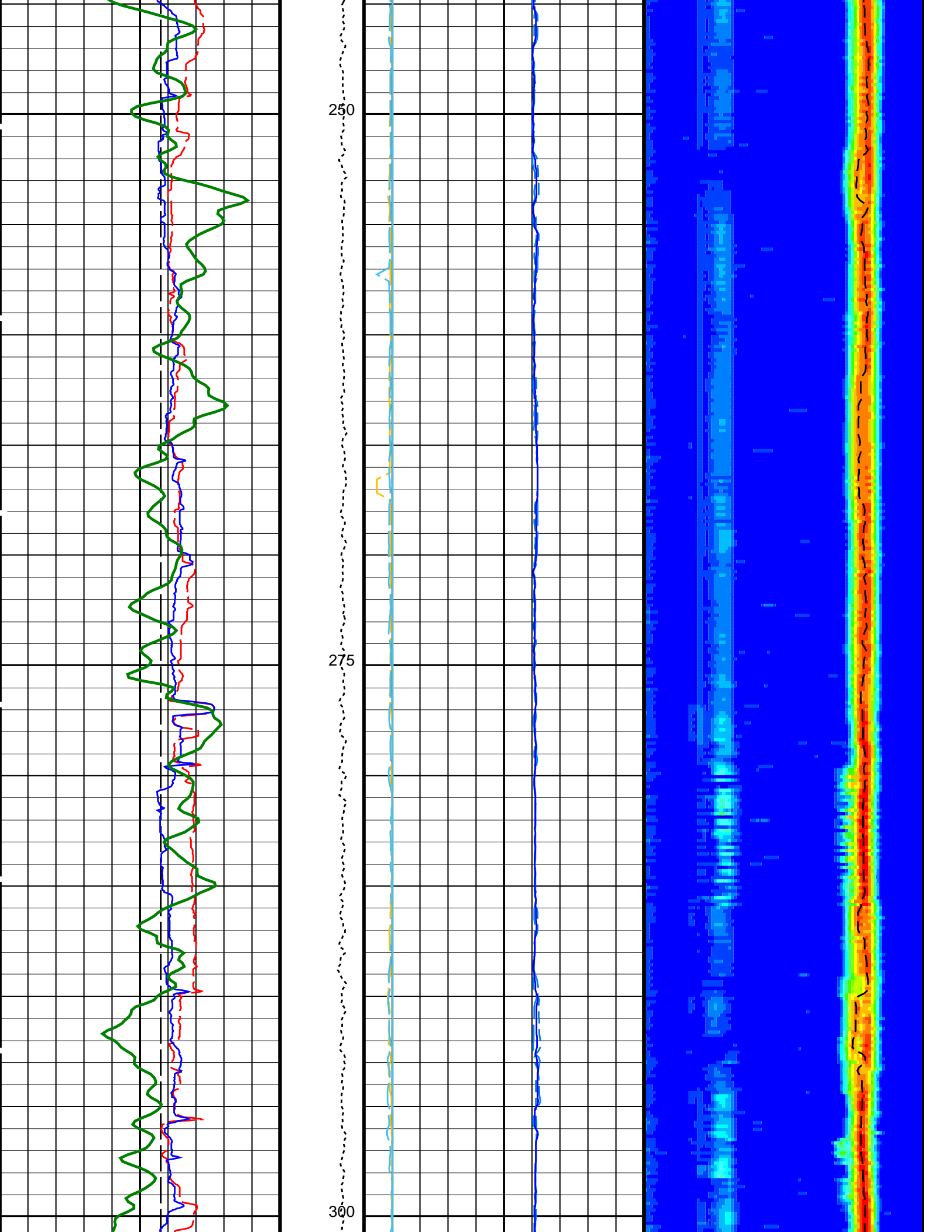
HNGS Spectroscopy Gamma Ray

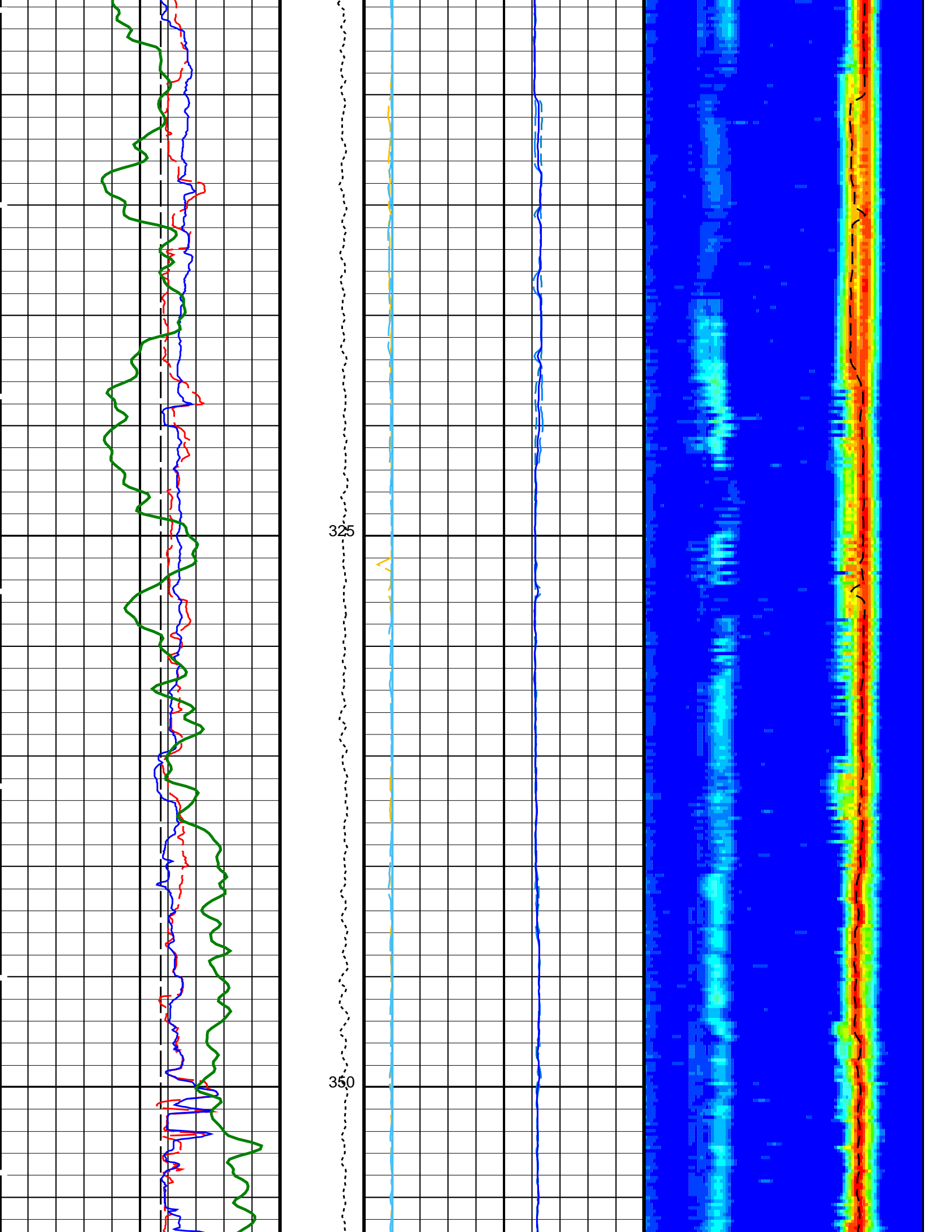
Peak Coherence / TA - P & S Shear

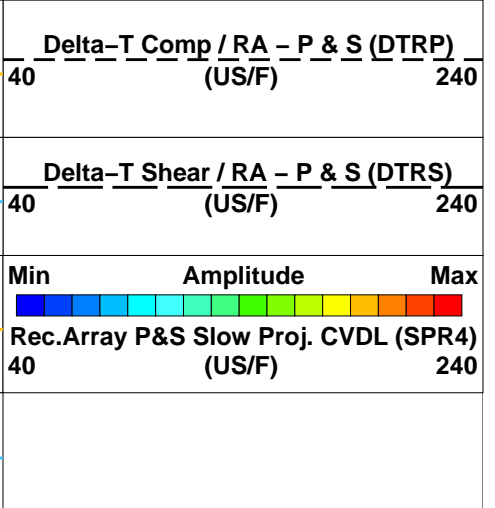
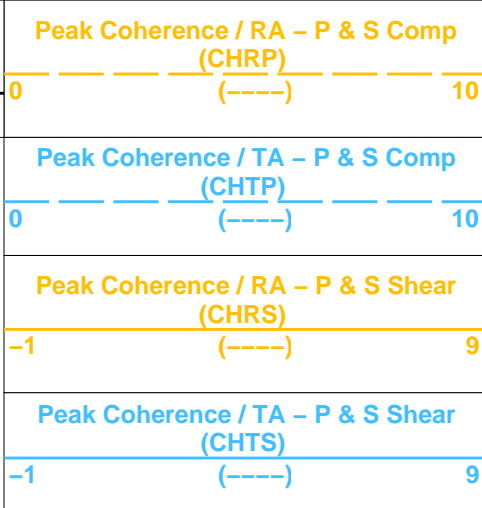
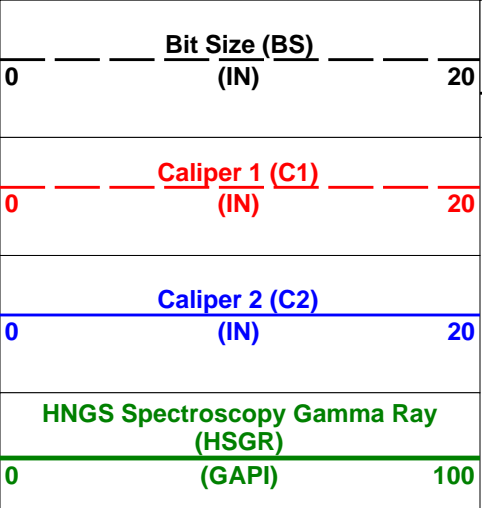
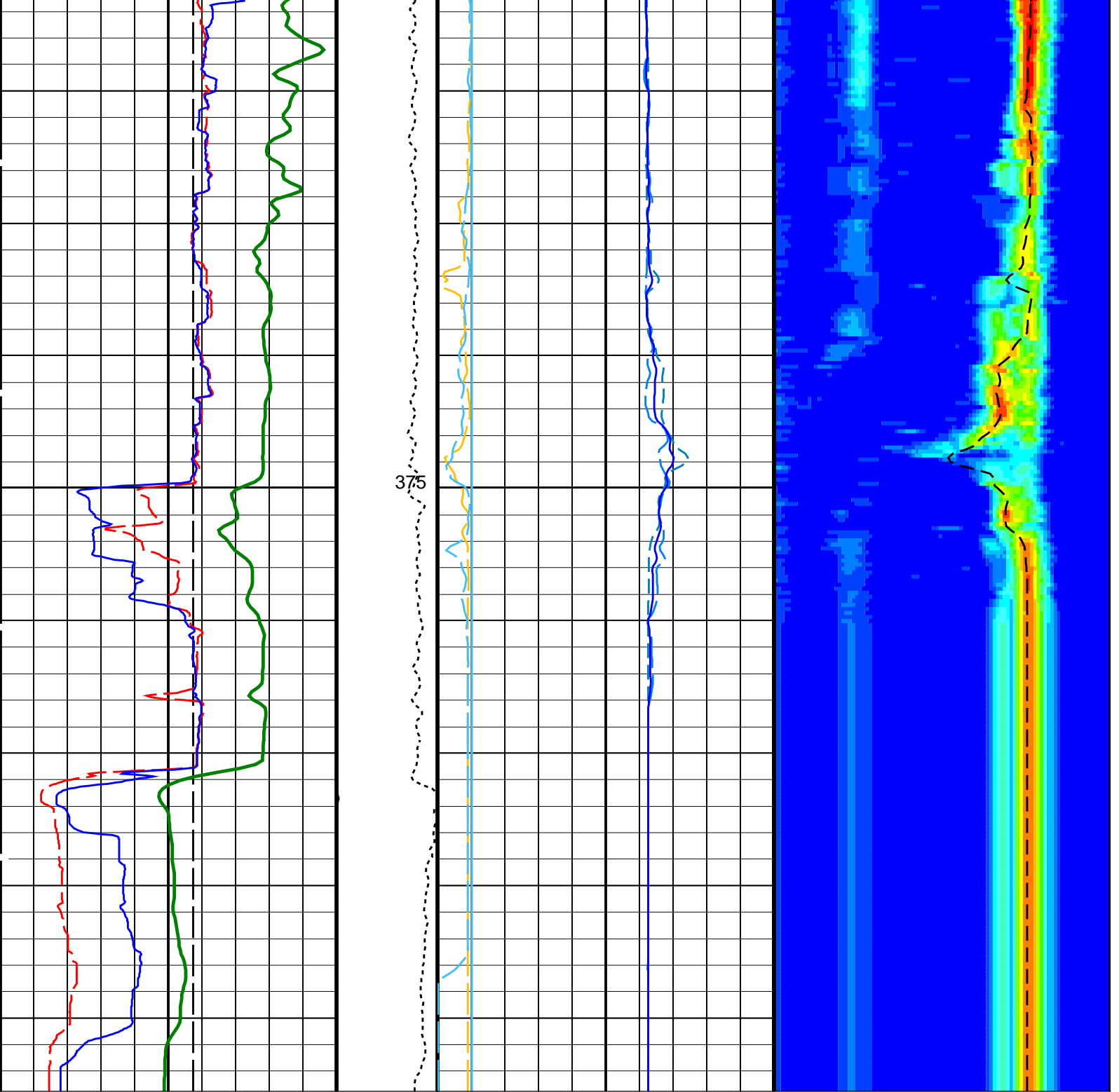












440	(US/F)	40
<u>Delta-T Comp / TA - P & S (DTTP)</u>		
440	(US/F)	40
<u>Delta-T Comp - P & S (DT4P)</u>		
440	(US/F)	40
<u>Delta-T Shear / RA - P & S (DTRS)</u>		
440	(US/F)	40
<u>Delta-T Shear / TA - P & S (DTTS)</u>		
440	(US/F)	40
<u>Delta-T Shear - P & S (DT4S)</u>		
440	(US/F)	40

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
DSST-B: Dipole Shear Imager - B			
BHS	Borehole Status	OPEN	
CASF	Label Casing Function - Monopole P&S	50	
COLL	Label Slowness Lower Limit - Monopole P&S Compressional	120	US/F
COUL	Label Slowness Upper Limit - Monopole P&S Compressional	240	US/F
DDE4	Digitizing Delay 4	0	US
DDEX	Digitizing Delay X	0	US
DSI4	Digitizer Sample Interval 4	10	US
DSIX	Digitizer Sample Interval X	40	US
DTF	Delta-T Fluid	189	US/F
DWC4	Digitizer Word Count 4	512	
DWCX	Digitizer Word Count X	512	
FILG	Label Fill Gap Control - Monopole P&S	COMP_SHEAR	
GCSE	Generalized Caliper Selection	C1	
LFC	Label Formation Character - Monopole P&S	DYNAMIC	
MCS	Mean Casing Slowness	57	US/F
MTXG	Monopole Transmitter Geometry	186	IN
NWI4	Number Waveform Items 4	8	
NWIX	Number Waveform Items X	0	
RSMN	Label Shear/Compressional Minimum Ratio - Monopole P&S	1.4	
RSMX	Label Shear/Compressional Maximum Ratio - Monopole P&S	2.12	
RX1G	Receiver 1 Geometry	294	IN
RX2G	Receiver 2 Geometry	300	IN
RX3G	Receiver 3 Geometry	306	IN
RX4G	Receiver 4 Geometry	312	IN
RX5G	Receiver 5 Geometry	318	IN
RX6G	Receiver 6 Geometry	324	IN
RX7G	Receiver 7 Geometry	330	IN
RX8G	Receiver 8 Geometry	336	IN
SAM4	DSST Sonic Acquisition Mode 4 - Monopole Mode for P&S	ODD	
SAMX	DSST Sonic Acquisition Mode X - Both Dipoles or Monopole Mode for Expert	OFF	
SAS4	STC Sonic Array Status - Monopole P&S	255	
SBO4	STC Search Band Offset - Monopole P&S	500	US
SBR4	STC Baseline Removal - Monopole P&S	ON	
SBW4	STC Search Bandwidth - Monopole P&S	2000	US
SFC4	STC Formation Character - Monopole P&S	SELECTABLE	
SFM4	STC Filter - Monopole P&S	B3-20K	
SHLL	Label Slowness Lower Limit - Monopole P&S Shear	210	US/F
SHUL	Label Slowness Upper Limit - Monopole P&S Shear	240	US/F
SLL4	STC Slowness Lower Limit - Monopole P&S	40	US/F
SST4	STC Slowness Step - Monopole P&S	2	US/F
SSW4	STC Source Waveform - Monopole P&S	WF_SAM4	
STLL	Label Slowness Lower Limit - Monopole Stoneley	180	US/F
STUL	Label Slowness Upper Limit - Monopole Stoneley	780	US/F
SUL4	STC Slowness Upper Limit - Monopole P&S	440	US/F
SWD4	STC Slowness Width - Monopole P&S	10	US/F
TBF4	STC Time for Baseline Fill - Monopole P&S	300	US
TLL4	STC Time Lower Limit - Monopole P&S	150	US
TST4	STC Time Step - Monopole P&S	50	US
TUL4	STC Time Upper Limit - Monopole P&S	5110	US
TWD4	STC Time Width - Monopole P&S	1000	US
TWI4	STC Integration Time Window - Monopole P&S	500	US
TWSX	Transmitter Waveform Select X	0	
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	

BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	C1	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.0277771	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	-999.25	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	-999.25	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.00642	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.994636	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
System and Miscellaneous			
BS	Bit Size	11.438	IN
DFD	Drilling Fluid Density	1.26	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST_P_S_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 20-Sep-2013 13:54

OP System Version: 19C0-187

MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

Input DLIS Files

DEFAULT	FMS_DSI_NGS_035PUP	FN:36	PRODUCER	31-Aug-2013 13:39	397.8 M	90.1 M
---------	--------------------	-------	----------	-------------------	---------	--------

Output DLIS Files

DEFAULT	FMS_DSI_NGS_047PUP	FN:53	PRODUCER	20-Sep-2013 13:54		
CLIENT	FMS_DSI_NGS_047PUC	FN:54	CUSTOMER	20-Sep-2013 13:54		



Main Pass
1:200 Scale

MAXIS Field Log

Company: Lamont Doherty Earth Observatory Well: Expedition 346, Site U1430B

Input DLIS Files

DEFAULT	FMS_DSI_NGS_037PUP	FN:40	PRODUCER	31-Aug-2013 13:47	397.8 M	-10.1 M
---------	--------------------	-------	----------	-------------------	---------	---------

Output DLIS Files

DEFAULT	FMS_DSI_NGS_048PUP	FN:55	PRODUCER	20-Sep-2013 13:55	397.8 M	-10.1 M
CLIENT	FMS_DSI_NGS_048PUC	FN:56	CUSTOMER	20-Sep-2013 13:55	397.8 M	-10.1 M

OP System Version: 19C0-187

MEST-B 19C0-187
 DSST-B 19C0-187
 HNGS-BA 19C0-187

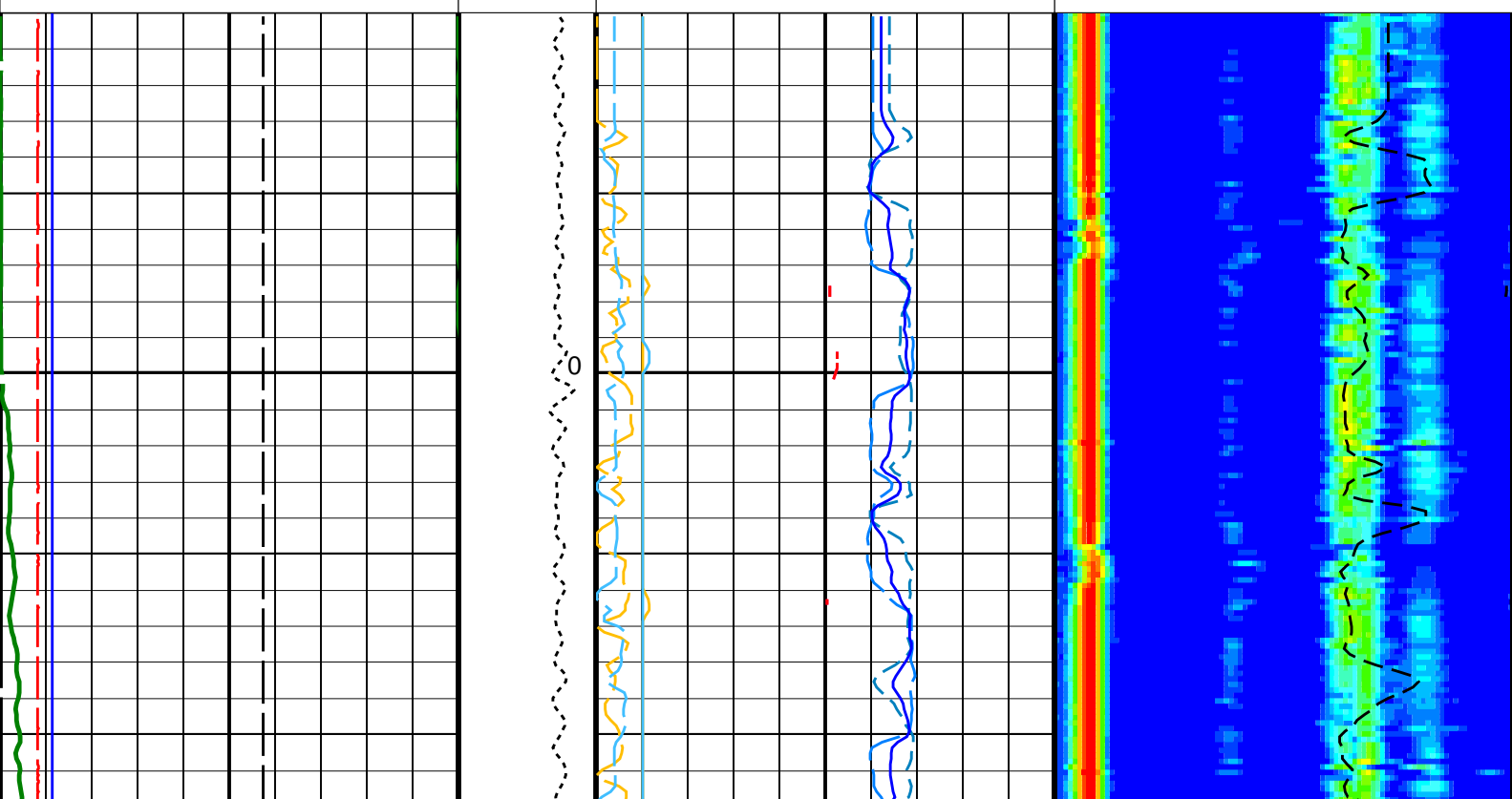
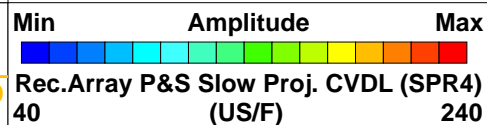
DTA-A
 HNGC-B
 EDTC-B

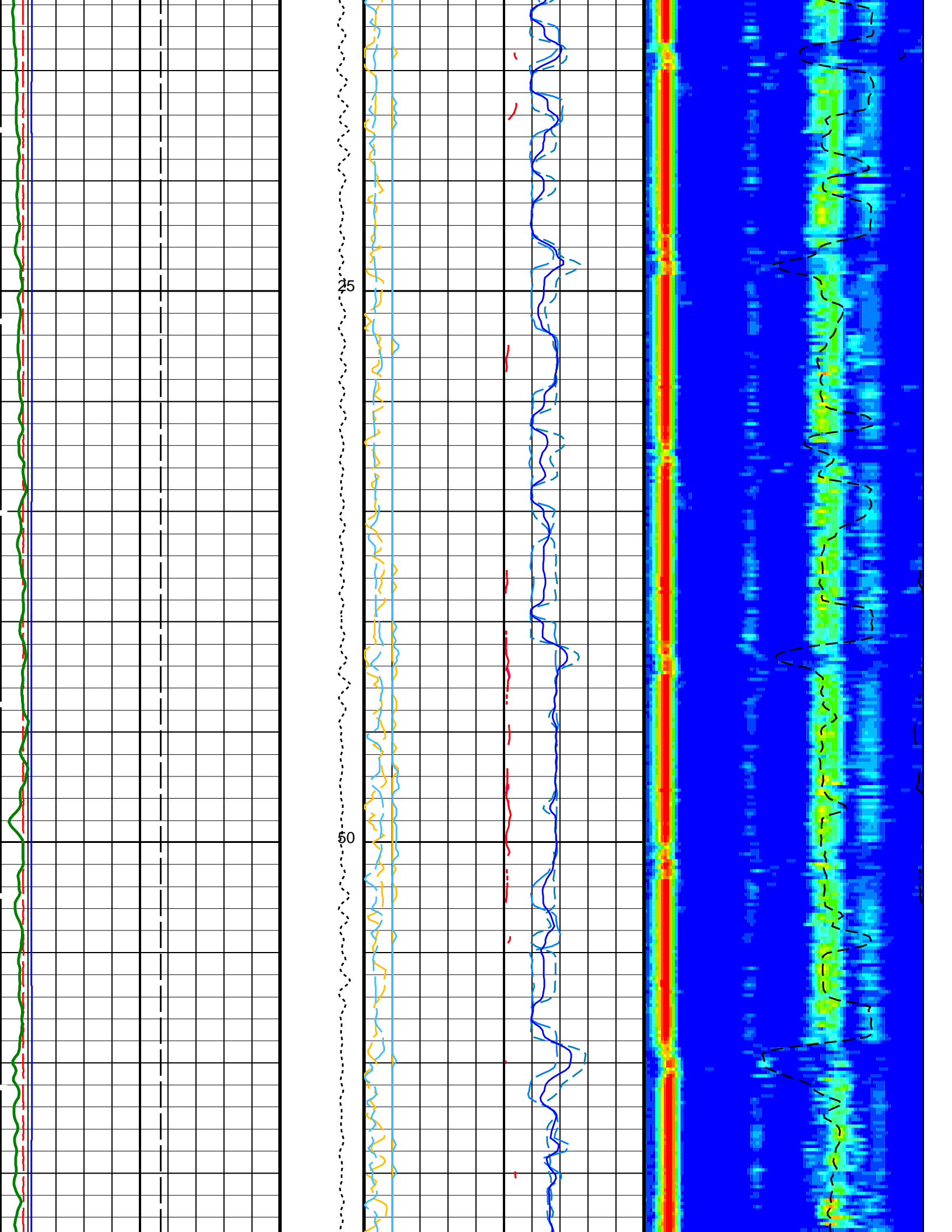
19C0-187
 19C0-187
 SKK-5169-EDTCB

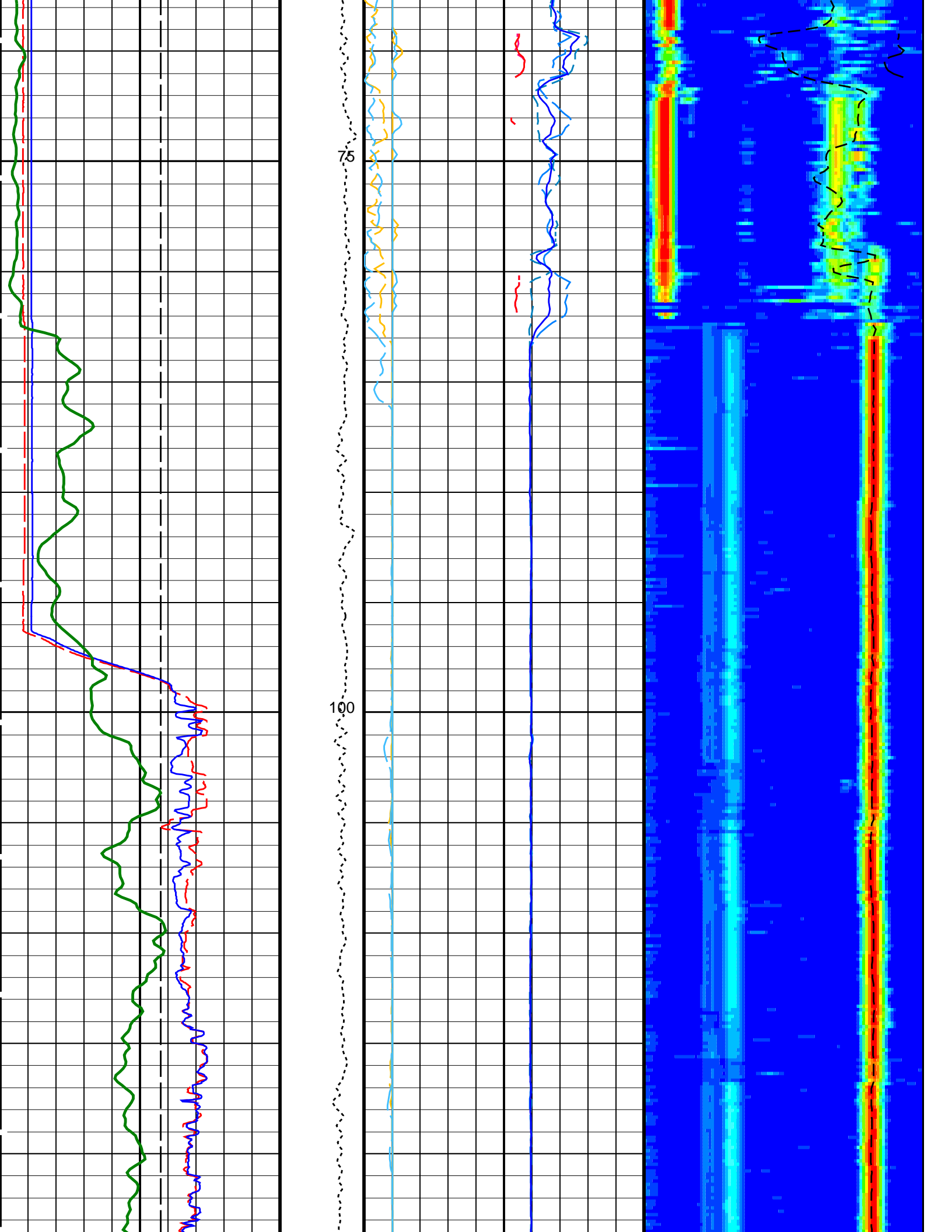
PIP SUMMARY

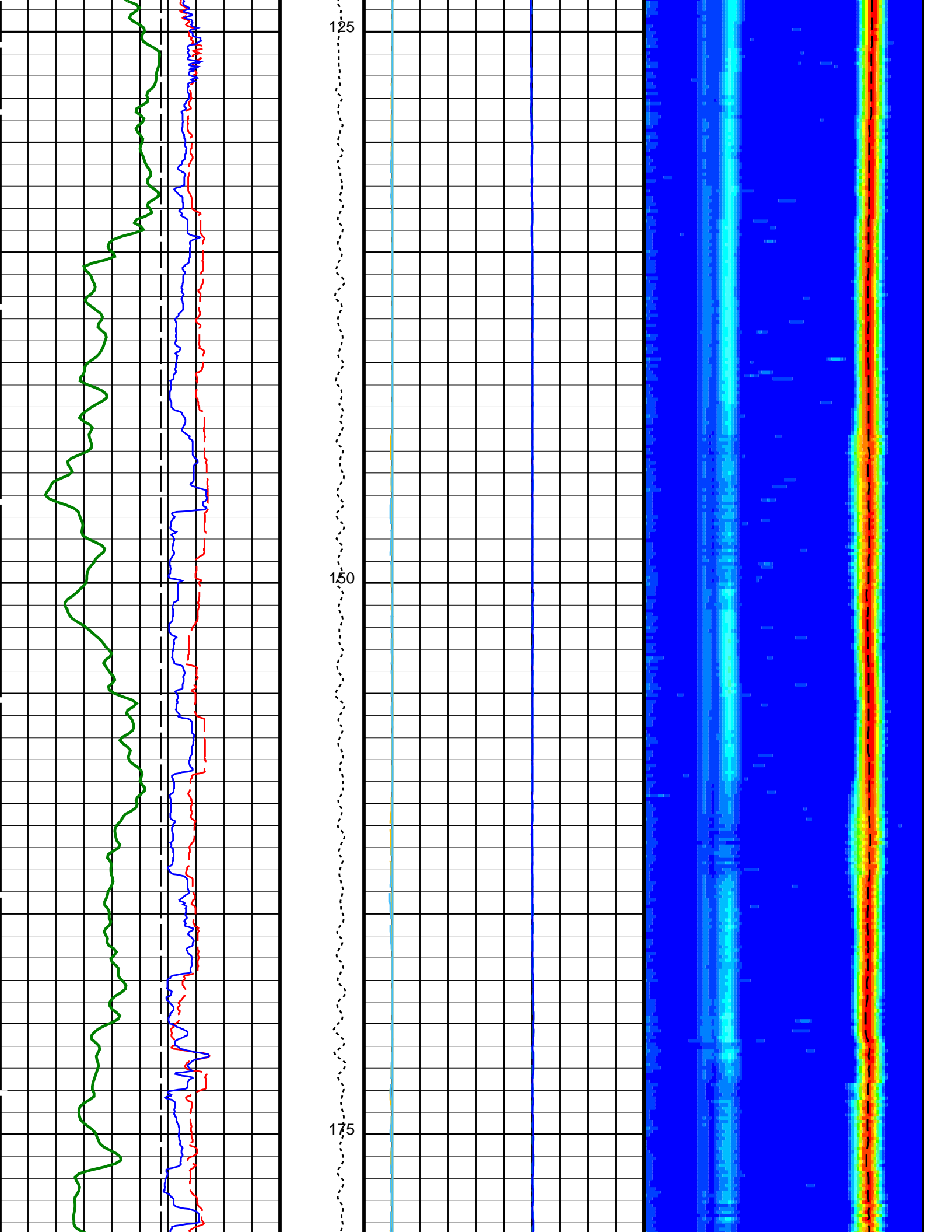
Time Mark Every 60 S

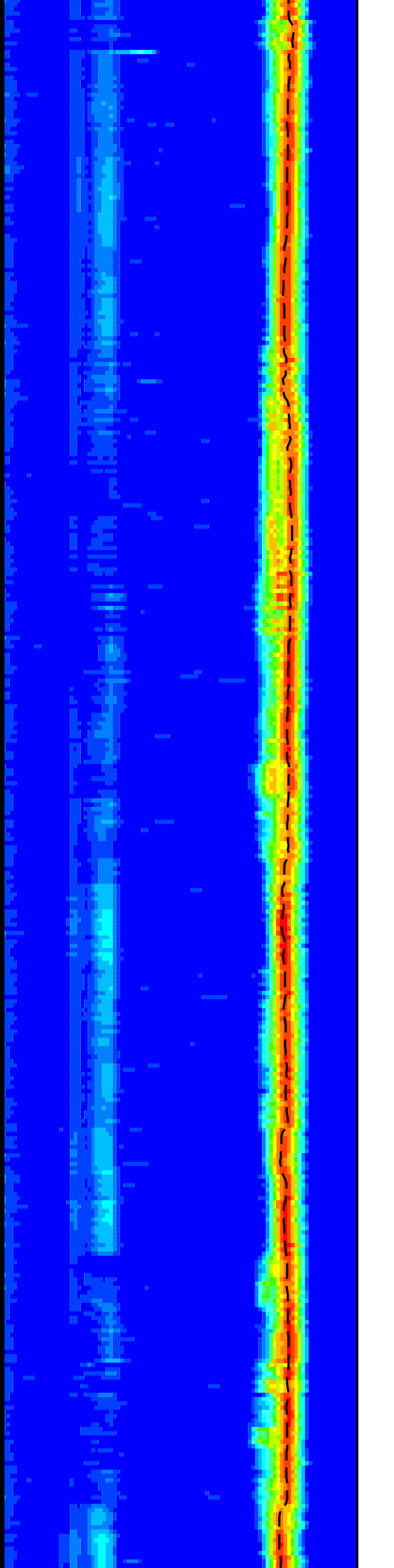
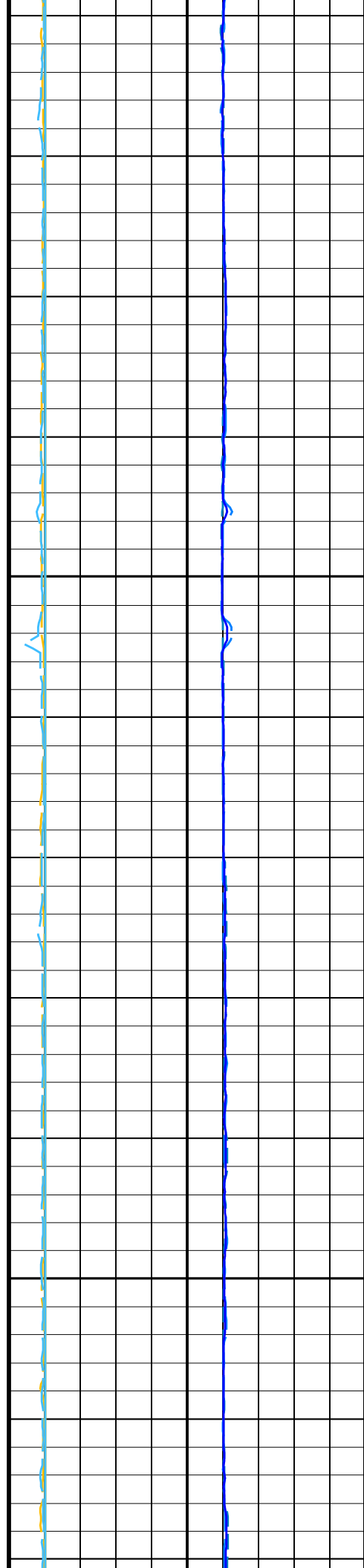
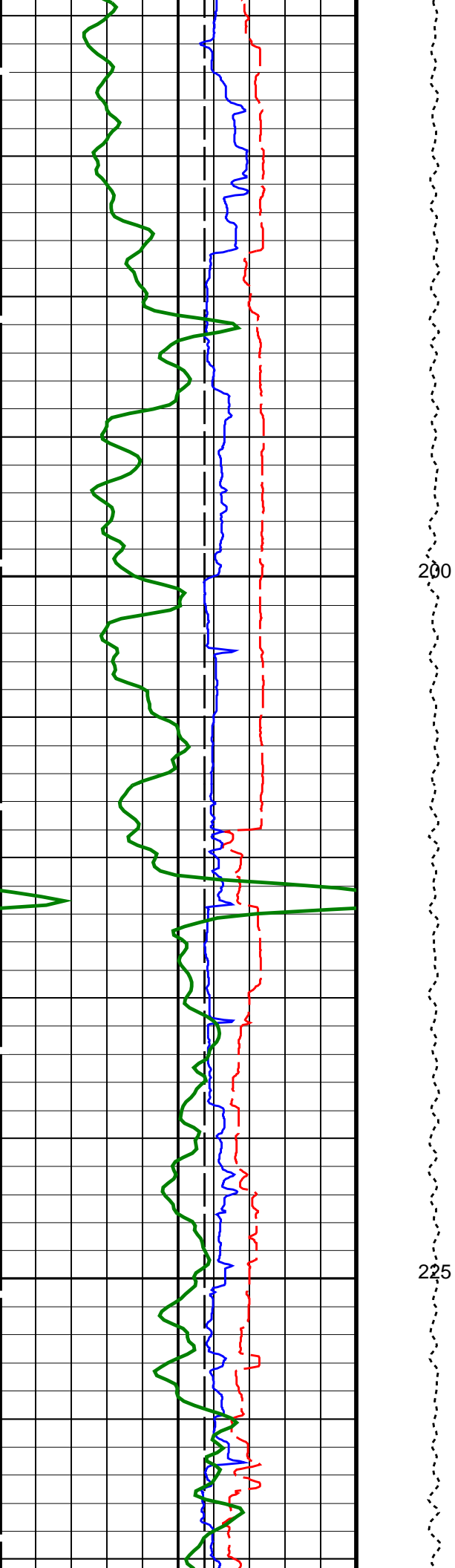
		Delta-T Shear - P & S (DT4S)	
		440 (US/F) 40	
		Delta-T Shear / TA - P & S (DTTS)	
		440 (US/F) 40	
		Delta-T Shear / RA - P & S (DTRS)	
		440 (US/F) 40	
		Delta-T Comp - P & S (DT4P)	
		440 (US/F) 40	
		Delta-T Comp / TA - P & S (DTTP)	
		440 (US/F) 40	
		Delta-T Comp / RA - P & S (DTRP)	
		440 (US/F) 40	
HNGS Spectroscopy Gamma Ray (HSGR)		Peak Coherence / TA - P & S Shear (CHTS)	
0 (GAPI) 100		-1 (----) 9	
Caliper 2 (C2)		Peak Coherence / RA - P & S Shear (CHRS)	
0 (IN) 20		-1 (----) 9	
Caliper 1 (C1)		Peak Coherence / TA - P & S Comp (CHTP)	
0 (IN) 20		0 (----) 10	
Bit Size (BS)		Peak Coherence / RA - P & S Comp (CHRP)	
0 (IN) 20		0 (----) 10	
	Tension (TENS) (LBF)	Delta-T Shear / RA - P & S (DTRS)	
	0 5000	40 (US/F) 240	
		Delta-T Comp / RA - P & S (DTRP)	
		40 (US/F) 240	

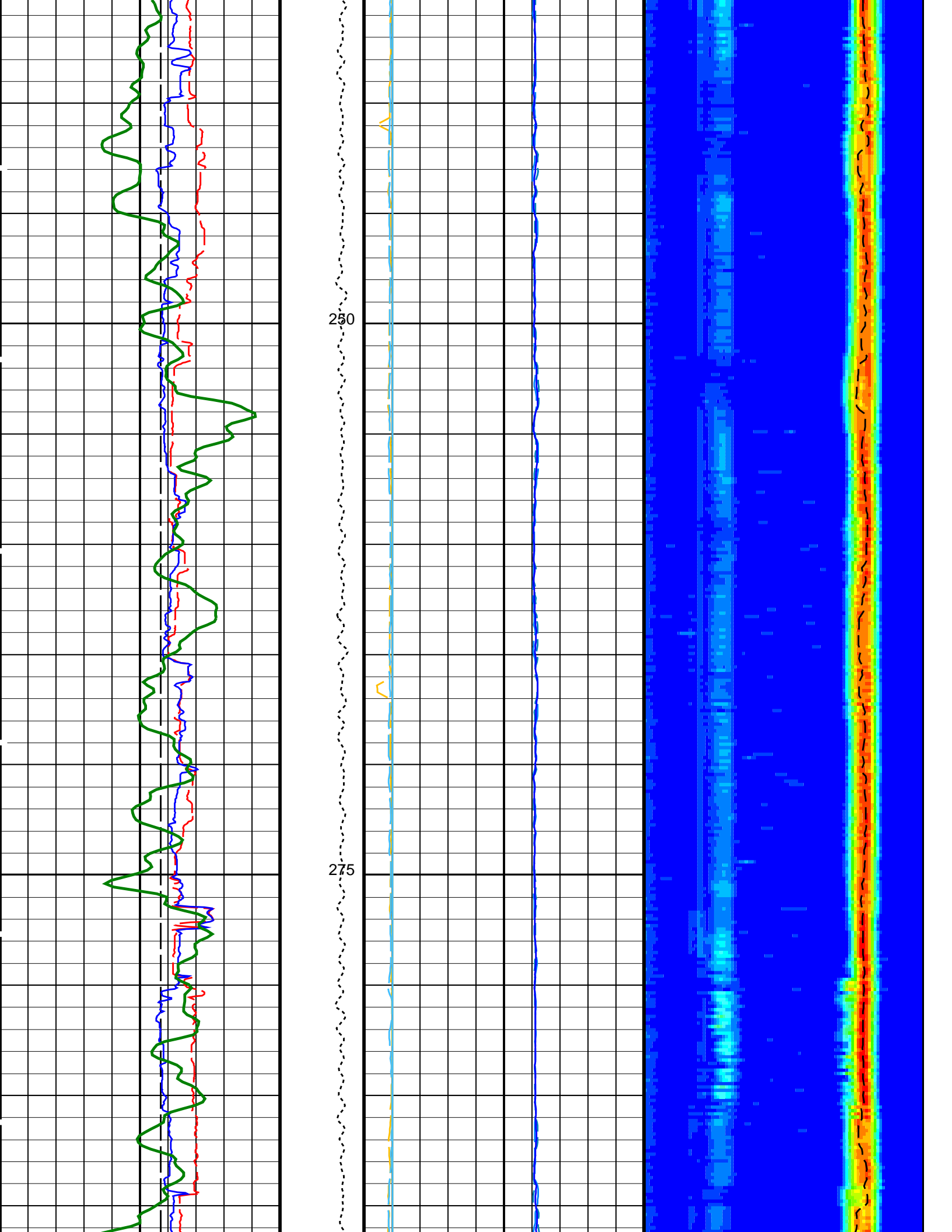


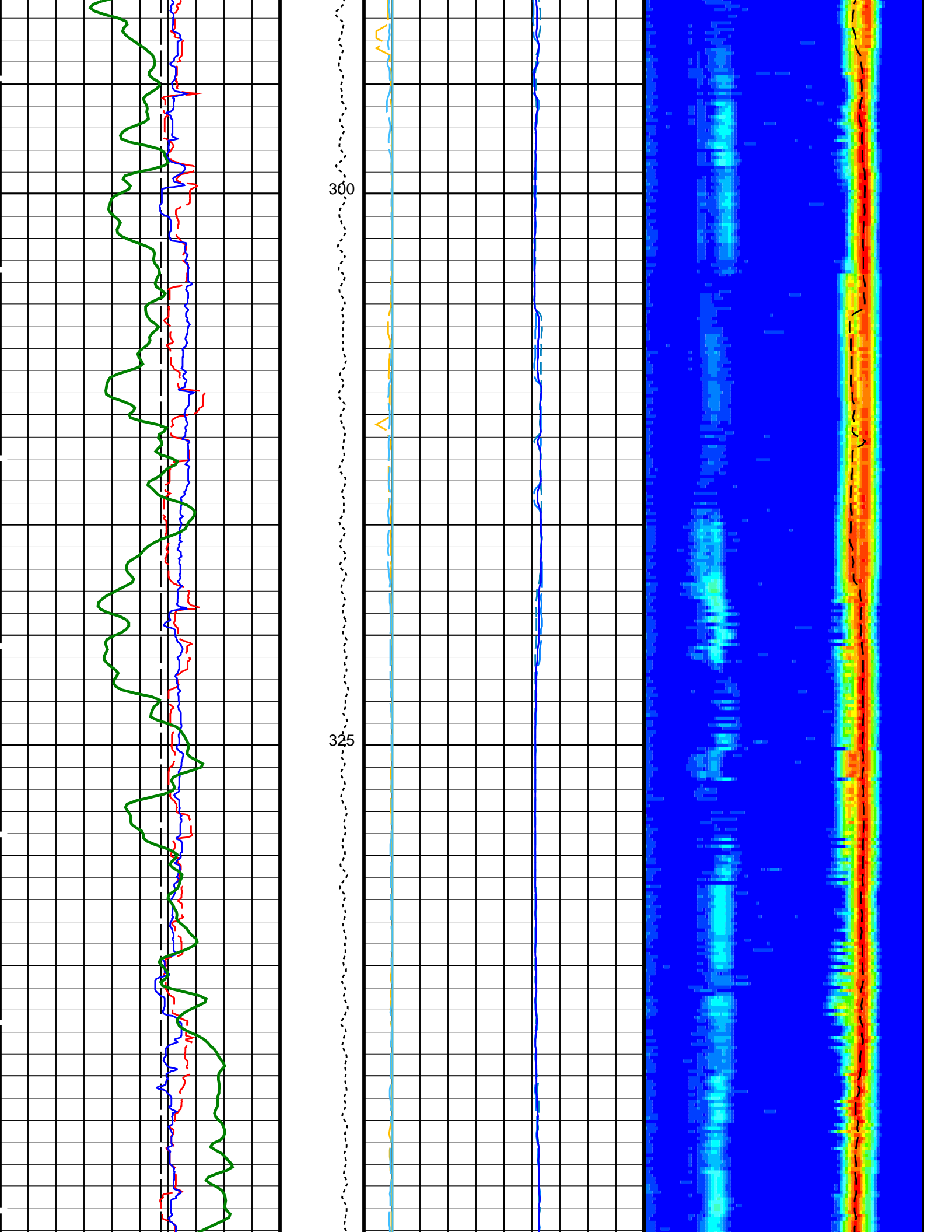


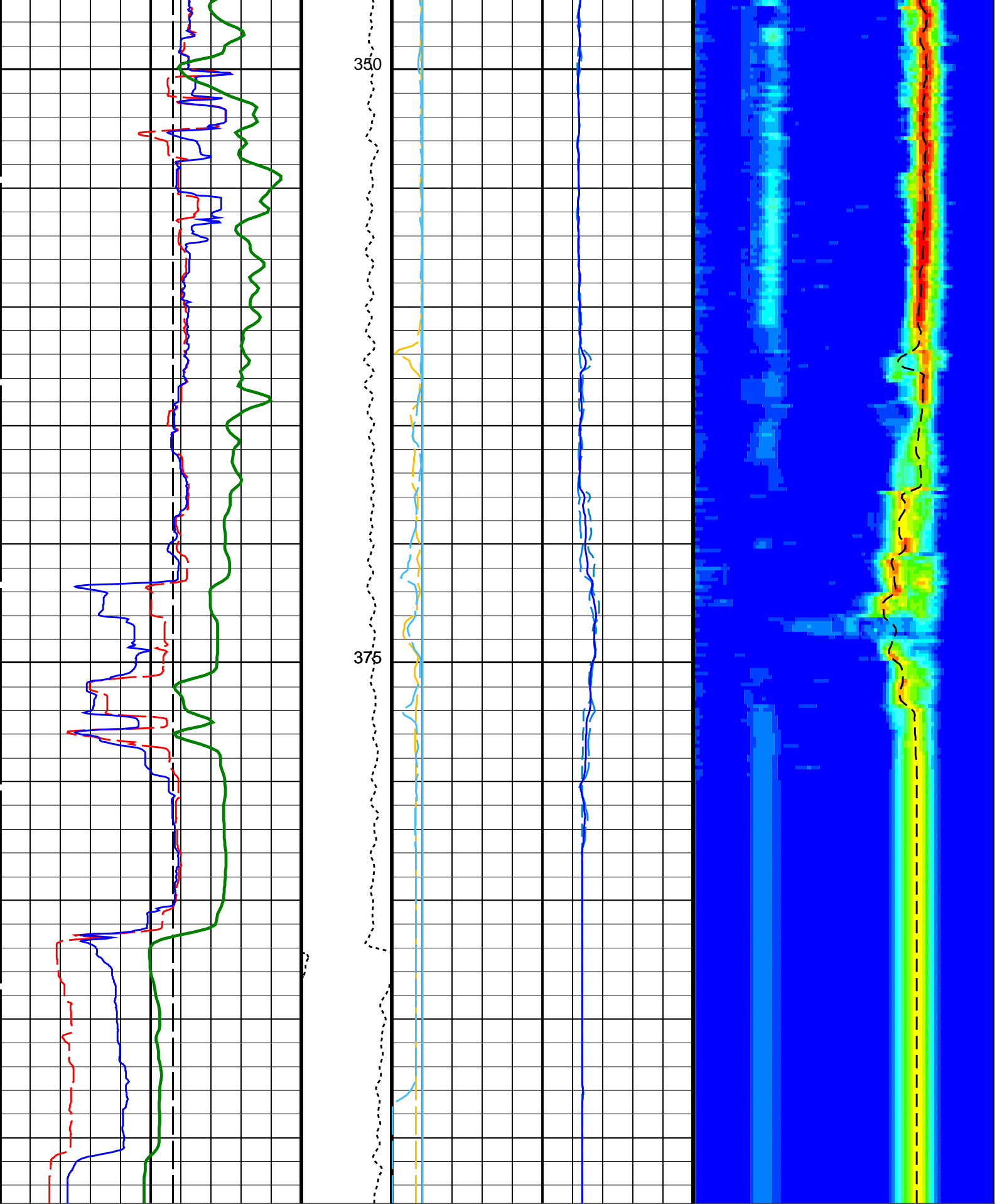












Bit Size (BS)
(IN)

Tension
(TENS)
(LBF)

Peak Coherence / RA - P & S Comp
(CHRP)
(-----)

Delta-T Comp / RA - P & S (DTRP)
(US/F)

Caliper 1 (C1)

Peak Coherence / TA - P & S Comp
(CHTP)

Delta-T Shear / RA - P & S (DTRS)

(IN)	0	(-----)	10	40	(US/F)	240
Caliper 2 (C2)		Peak Coherence / RA – P & S Shear (CHRS)		Min	Amplitude	Max
0	(IN)	20				
HNGS Spectroscopy Gamma Ray (HSGR)		Peak Coherence / TA – P & S Shear (CHTS)		Rec.Array	P&S Slow Proj.	CVDL (SPR4)
0	(GAPI)	100		40	(US/F)	240
		Delta-T Comp / RA – P & S (DTRP)				
		440	(US/F)	40		
		Delta-T Comp / TA – P & S (DTTP)				
		440	(US/F)	40		
		Delta-T Comp – P & S (DT4P)				
		440	(US/F)	40		
		Delta-T Shear / RA – P & S (DTRS)				
		440	(US/F)	40		
		Delta-T Shear / TA – P & S (DTTS)				
		440	(US/F)	40		
		Delta-T Shear – P & S (DT4S)				
		440	(US/F)	40		

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
DSST-B: Dipole Shear Imager – B		
BHS	Borehole Status	OPEN
CASF	Label Casing Function – Monopole P&S	50
COLL	Label Slowness Lower Limit – Monopole P&S Compressional	120 US/F
COUL	Label Slowness Upper Limit – Monopole P&S Compressional	240 US/F
DDE4	Digitizing Delay 4	0 US
DDEX	Digitizing Delay X	0 US
DSI4	Digitizer Sample Interval 4	10 US
DSIX	Digitizer Sample Interval X	40 US
DTF	Delta-T Fluid	189 US/F
DWC4	Digitizer Word Count 4	512
DWCX	Digitizer Word Count X	512
FILG	Label Fill Gap Control – Monopole P&S	COMP_SHEAR
GCSE	Generalized Caliper Selection	C1
LFC	Label Formation Character – Monopole P&S	DYNAMIC
MCS	Mean Casing Slowness	57 US/F
MTXG	Monopole Transmitter Geometry	186 IN
NWI4	Number Waveform Items 4	8
NWIX	Number Waveform Items X	0
RSMN	Label Shear/Compressional Minimum Ratio – Monopole P&S	1.4
RSMX	Label Shear/Compressional Maximum Ratio – Monopole P&S	2.12
RX1G	Receiver 1 Geometry	294 IN
RX2G	Receiver 2 Geometry	300 IN
RX3G	Receiver 3 Geometry	306 IN
RX4G	Receiver 4 Geometry	312 IN
RX5G	Receiver 5 Geometry	318 IN
RX6G	Receiver 6 Geometry	324 IN
RX7G	Receiver 7 Geometry	330 IN
RX8G	Receiver 8 Geometry	336 IN
SAM4	DSST Sonic Acquisition Mode 4 – Monopole Mode for P&S	ODD
SAMX	DSST Sonic Acquisition Mode X – Both Dipoles or Monopole Mode for Expert	OFF
SAS4	STC Sonic Array Status – Monopole P&S	255
SBO4	STC Search Band Offset – Monopole P&S	500 US
SBR4	STC Baseline Removal – Monopole P&S	ON
SBW4	STC Search Bandwidth – Monopole P&S	2000 US
SFC4	STC Formation Character – Monopole P&S	SELECTABLE
SFM4	STC Filter – Monopole P&S	B3-20K
SHLL	Label Slowness Lower Limit – Monopole P&S Shear	210 US/F
SHUL	Label Slowness Upper Limit – Monopole P&S Shear	240 US/F
SLL4	STC Slowness Lower Limit – Monopole P&S	40 US/F
ST4	STC Slowness Step – Monopole P&S	2 US/F

SSW4	STC Slowness Step - Monopole P&S	1	US/F
STLL	Label Slowness Lower Limit - Monopole Stoneley	180	US/F
STUL	Label Slowness Upper Limit - Monopole Stoneley	780	US/F
SUL4	STC Slowness Upper Limit - Monopole P&S	440	US/F
SWD4	STC Slowness Width - Monopole P&S	10	US/F
TBF4	STC Time for Baseline Fill - Monopole P&S	300	US
TLL4	STC Time Lower Limit - Monopole P&S	150	US
TST4	STC Time Step - Monopole P&S	50	US
TUL4	STC Time Upper Limit - Monopole P&S	5110	US
TWD4	STC Time Width - Monopole P&S	1000	US
TWI4	STC Integration Time Window - Monopole P&S	500	US
TWSX	Transmitter Waveform Select X	0	
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	C1	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.00407081	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	-999.25	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	-999.25	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.02293	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.02458	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
System and Miscellaneous			
BS	Bit Size	11.438	IN
DFD	Drilling Fluid Density	1.26	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST_P_S_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 20-Sep-2013 13:55

OP System Version: 19C0-187

MEST-B	19C0-187	DTA-A	19C0-187
DSST-B	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

Input DLIS Files

DEFAULT	FMS_DSI_NGS_037PUP	FN:40	PRODUCER	31-Aug-2013 13:47	397.8 M	-10.1 M
---------	--------------------	-------	----------	-------------------	---------	---------

Output DLIS Files

DEFAULT	FMS_DSI_NGS_048PUP	FN:55	PRODUCER	20-Sep-2013 13:55		
CLIENT	FMS_DSI_NGS_048PUC	FN:56	CUSTOMER	20-Sep-2013 13:55		



Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check							
Master: 29-Jul-2013 20:46 Before: 30-Aug-2013 3:43 After: 30-Aug-2013 9:52							
Na 511 Peak Loc	40.00	39.74	39.66	39.66	-0.001842	1.000	
Na 511 Peak Res	15.50	15.31	14.99	15.59	0.6071	2.000	%
High Voltage	1150	1168	1175	1177	1.875	N/A	V
Na 1785 Peak Loc	142.6	142.6	141.1	143.1	1.995	7.000	
Na 1785 Peak Res	8.500	9.002	8.739	8.350	-0.3891	2.000	%
Temperature	15.50	21.46	30.66	29.21	-1.452	N/A	DEGC
Na Count Rate	45.00	15.10	12.22	12.96	0.7358	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check							
Master: 29-Jul-2013 20:46 Before: 30-Aug-2013 3:43 After: 30-Aug-2013 9:52							
Na 511 Peak Loc	40.00	39.58	39.50	39.79	0.2864	1.000	
Na 511 Peak Res	15.50	16.04	16.51	15.30	-1.204	2.000	%
High Voltage	1150	1093	1109	1110	1.251	N/A	V
Na 1785 Peak Loc	142.6	141.7	143.1	142.4	-0.7710	7.000	
Na 1785 Peak Res	8.500	9.499	8.731	9.377	0.6464	2.000	%
Temperature	15.50	21.65	30.81	30.84	0.03577	N/A	DEGC
Na Count Rate	45.00	14.93	12.29	12.87	0.5788	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2							
Master: 29-Jul-2013 20:46 Before: 30-Aug-2013 3:43 After: 30-Aug-2013 9:52							
Coincidence Count Rate Ratio	1.000	1.015	0.9928	1.007	0.01398	0.05000	
Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration							
Before: 30-Aug-2013 3:44							
EDTC Z-Axis Acceleration	9.810	N/A	9.794	N/A	N/A	N/A	M/S2
Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration							
Before: 30-Aug-2013 3:38							
Gamma Ray (Jig – Bkg)	204.1	N/A	204.1	N/A	N/A	18.55	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	N/A	N/A	15.00	GAPI

Litho-Density Spectroscopy Cartridge – B / Equipment Identification

Primary Equipment: LDSC Cartridge		LDSC – B	326
Auxiliary Equipment: LDSC Housing		LDSH – A	303

Hostile Natural Gamma Ray Cartridge – B / Equipment Identification




Primary Equipment: HNGC Cartridge		HNGC – B	300
Auxiliary Equipment: HNGC Housing		HNGH – A	115

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment: HNGS Sonde		HNGS – BA	194
Auxiliary Equipment: HNGS Sonde Housing		HNSH – BA	205
Gamma Source Radioactive		GSR – U	616008

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 1 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		39.74	Master		15.31	Master		1168

Before		39.66	Before		14.99	Before		1175
After		39.66	After		15.59	After		1177
37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)		
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		142.6	Master		9.002	Master		21.46
Before		141.1	Before		8.739	Before		30.66
After		143.1	After		8.350	After		29.21
135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)		
Phase	Na Count Rate CPS	Value						
Master		15.10						
Before		12.22						
After		12.96						
10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)								
Master: 29-Jul-2013 20:46			Before: 30-Aug-2013 3:43			After: 30-Aug-2013 9:52		

Hostile Natural Gamma Ray Sonde Wellsite Calibration								
Detector 2 Check								
Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		39.58	Master		16.04	Master		1093
Before		39.50	Before		16.51	Before		1109
After		39.79	After		15.30	After		1110
37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)		
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		141.7	Master		9.499	Master		21.65
Before		143.1	Before		8.731	Before		30.81
After		142.4	After		9.377	After		30.84
135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)		
Phase	Na Count Rate CPS	Value						
Master		14.93						
Before		12.29						
After		12.87						
10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)								
Master: 29-Jul-2013 20:46			Before: 30-Aug-2013 3:43			After: 30-Aug-2013 9:52		

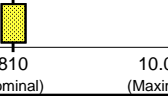
Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		1.015
Before		0.9928
After		1.007
0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		
Master: 29-Jul-2013 20:46		
Before: 30-Aug-2013 3:43		
After: 30-Aug-2013 9:52		

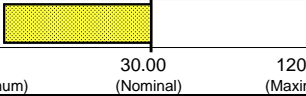
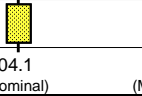
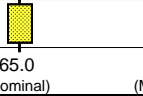
Enhanced DTS Cartridge / Equipment Identification

Primary Equipment:
EDTC Gamma Ray Detector
Enhanced DTS Cartridge

EDTG - A/B 8305
EDTC - B 8317

Auxiliary Equipment:

Enhanced DTS Cartridge Wellsite Calibration		
EDTC Accelerometer Calibration		
Phase	EDTC Z-Axis Acceleration M/S2	Value
Before		9.794
	9.610 (Minimum)	9.810 (Nominal)
		10.01 (Maximum)
Before: 30-Aug-2013 3:44		

Enhanced DTS Cartridge Wellsite Calibration									
Detector Calibration									
Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig - Bkg) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI	Value	
Before		1.864	Before		204.1	Before		165.0	
	0 (Minimum)			185.5 (Minimum)			150.0 (Minimum)		
	30.00 (Nominal)			204.1 (Nominal)			165.0 (Nominal)		
	120.0 (Maximum)			222.7 (Maximum)			180.0 (Maximum)		
Before: 30-Aug-2013 3:38									

Company: **Lamont Doherty Earth Observatory**

Schlumberger

Well: **Expedition 346, Site U1425B**

Field: **Asian Monsoon**

Rig: **JOIDES Resolution**

Country: **USA**

DSI

P & S Monopole